

THE THEORY AND PRACTICE OF EDUCATION

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INTRODUCTION

TO say no two children are alike is a platitude, but it is also a summary of many and curiously different facts. Even if children resemble each other physically, as in the case of many twins, and are brought up together, the careful observer notes differences. It is often stated that such divergences are due to environment and the controversy has long been waged as to which is the more potent factor in shaping our ends, heredity or environment. Probably this is one of the many questions that should not be asked unless the putter is willing to accept 'Both' as an answer and get no further. Gessel suggests the solution when he writes 'the supreme genetic law seems to be this: All present growth hinges on past growth. Growth is not a simple function neatly determined by units of inheritance and units of environment, but is an historical complex which reflects at every stage the past which it incorporates. In other words we are led astray by an artificial dualism of heredity and environment if it blinds us to the fact that growth is a continuous self-conditioning process rather than a drama controlled, *ex machina*, by two forces.'¹ Here then is suggested the difference between our twins, for even though they grew up together their history is different. Joan suggests and Sheila agrees or disagrees; Sheila loses her temper and Joan reminds her that they have promised to be good; Sheila runs the errand and Joan is reproached for being slow and Gessel's 'historical complex', even at the end of any normal day, at once reflects a past which is in detail dissimilar.

¹ *Infancy and Human Growth*.

When the children are separated, the daily happenings and the consequent reactions are far more unlike. If it is true that the re-action to a given situation differs in the case of twins, it is far more true of the members of even a small class. In the main the teacher may think of Class II, but Class II really consists of twenty very different children no two of whom can react to her plans for them in exactly the same way. One has come from a home where interest in books and in the affairs of men is predominant, another from a game-playing community. One fits into his home and comes with a happy feeling of assurance, while another is constantly making mistakes. The analysis could be continued indefinitely, going back to the 'sense they were born with', different in each case.

But taking our illustration a step further, it is worth while to consider the reaction of the last two children to such a simple suggestion as that they should try to make a model. The child who gets on at home is fearless in face of a new experience, the child who is constantly in hot water is as likely as not to hang back and get the reputation for lacking initiative. Yet all the time he may be longing to make that model! Their future history will again be correspondingly different, for the child who made the model, bad though the result may have been, enjoyed his work, while the child who only looked on felt frustrated—of all feelings the most depressing. Hence at the onset of our study of education we are brought face to face with the problem of child nature. Only by a careful study of that problem can we get help on such questions as suitable environment, subject matter and methods of teaching.

Fortunately for teachers, a great body of statistical work dealing with children's capacities is now at their service and such detailed studies of the reactions of a few children as are given in Susan Isaacs' *Intellectual Growth of Young Children*, give valuable suggestions for the type

of environment and work most likely to encourage initiative and interest in learning.

In the account of a child's characteristics, innate and acquired, that follows, an attempt has been made to state in small compass the findings of psychologists and experimental pedagogues which seem to the writer to be the most important for teachers.

No text-book, or indeed any book whatever, can take the place of personal observation, and an important part of every teacher's work is the systematic study of children, both as individuals and as groups. Hence the results of even the most expert psychologist should be used as aids to extend our understanding of children and should be used with caution until we are sure they apply to children with whom we are concerned. This statement is not intended to imply scepticism of the work of modern psychologists, but to stress the fact that each child is an individual, each little group of children has its own characteristics and that their conduct will not be exactly like that of any other group, however great is the statistical evidence that suggests it should be. All that psychologists can do for us teachers, and indeed it is an enormous debt we owe them, is to suggest wise lines of thinking about children and so helping us to understand them.

Each teacher will eventually find more help in one school of psychologists than another. Personally, Adler's theory of the child's pattern of the universe has helped me greatly in dealing with individuals. I have, however, in the following account of a child's characteristics tried to state only generally accepted truths and to avoid even suggesting a solution of such problems as psychologists disagree on amongst themselves. It seems to me a mistake for a teacher, who must keep conversant with theory and practice of such diverse subjects as school organization, methods of teaching, and the social changes that directly

affect schools, to assume that pure psychology is also in his province.

Whether education should rightly be called a science or an art is a matter of controversy but it is undoubtedly a synthetic study that depends for its data on historians, moral philosophers, sociologists, physiologists and psychologists; he who studies it must have the power to collect the relevant principles and facts from many sources. In a sense he will be a dabbler with no claim to be considered an authority in any one science, but where he should be an authority is on the behaviour of the actual children with whom he works, on the methods of educating them for the kind of state which the sociologist desires, and on the application of the findings of psychologists to all branches of education.

Even to keep aware of the results of so many studies is an overwhelming task beyond the power of the teacher, busy all day in the class-room and often many nights at resultant tasks and realizing the need of time to live his own life and mix with his fellows. That is the justification for this type of book—the work not of a professional psychologist, philosopher or sociologist, but of a teacher with sufficient leisure to hold a watching brief for those findings of specialists that should be helpful to the practical educator.

As the most important study for a teacher is children, a very large part of this book is concerned with that work of psychologists that has a direct bearing on educational problems—the right treatment of children, the best methods of learning and teaching, &c. But what philosophers and sociologists can tell us of the aims and purposes of education has also been considered, not in separate sections but as the need arises.

CHAPTER I

INNATE CHARACTERISTICS OF CHILDREN

THE VALUE OF CLASSIFICATION

FOR the purpose of child study it is useful to isolate the child from his environment, to regard him as a self-conditioning unit and to collect what knowledge we can obtain from psychology and kindred sciences as to the characteristics and endowments we can expect. Birth is usually taken as the starting-point of study, but the tendency of modern psychology is to think of the growth of the child's mind as continuous as that of his body and to stress the importance of the early months of ante-natal life. Physically he is still helpless at birth, but he is a complete little person, not lacking protective coverings as some birds, sight as some mammals. He can breathe, cry, hear acutely though not discriminatingly, suck, move his large limbs and, after a few weeks, his head from side to side. Any one who has watched him grow has seen how rapidly he acquires control over his limbs and how comparatively slowly he perfects his movements. Thus a kitten probably acquires a maximum of skill when six weeks old, but it is twenty-four months before a child can feed himself with nice movements, and both physical and mental skill certainly can improve during the first half of a man's life.

As soon as an observant person begins to watch the natural growth of any living thing, be it tadpoles or children, he is amazed at the different rate of growth among individuals of the same species. Among the higher species

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biologically—dogs, apes and mankind—not only do individuals grow at different rates but they rapidly display very different characteristics. Thus a man has intimate knowledge of the personality of his dog, and a shepherd is surprised that the ordinary country lover cannot tell one sheep from another. In man these individual differences are amazing even to the most unskilled observer.

For the sake of clarity it is easier to describe these characteristics under headings, but it is wise to remember that by giving a name to a characteristic we have not explained it. At the most we have classified it—putting it into a larger class in order to suggest certain attributes. Thus when we say John opens the drawer because he is naturally curious, we are only reminding ourselves that John was born so and must be treated accordingly. Given the fact that John is naturally curious we then must treat him in such a way that his curiosity has happy results and not such as estrange him from his fellow adults.

It is for such reasons that a classification of a child's endowments culled from psychologists and physiologists is of use to teachers. It reminds them to accept certain characteristics as facts and accepting facts is half-way to dealing with them.

Here the work of psychologists and doctors is of enormous value to teachers and it is to them we go for information on the make-up of the children we teach.

There is no classification of human characteristics to which all psychologists conform and the layman can only limp behind the expert, gathering what conclusions seem to be of tested value in his work.

To a very great extent the characteristics teachers look for in school children—their powers of creative and imaginative work, their methods of memorizing and success in the process, their attitudes towards their fellows and their

ability to make good in the school world—have their origin in their temperaments, sense equipment, native propensities or instincts—and native intelligence. Hence it is with these innate qualities that we must begin our study.

TEMPERAMENT

Here we have an example of an hypothesis formulated by psychologists to bring order into the chaos of observed fact—the variability of individuals' reactions to environment. But the psychologist would distinguish carefully between native and acquired reactions; thus a child may respond quickly to a stimulus because he is naturally quick, when we could say he was temperamentally quick, or because he had developed such a fund of interest in that side of life that he was quick almost in spite of his temperament. Again people who seem lethargic in the ordinary affairs of life may show nimble characteristics in their own laboratories.

Hence the study of temperament is most difficult and liable to many errors unless it can be made on young children when the tentative use of a classification may be helpful. But people can't be classified like triangles, and teachers must not assume their judgement is necessarily right, or that the child will necessarily react to a given stimulus in a given way even if his temperament has been correctly diagnosed. Thus *ex hypothesi* an isosceles triangle has equal angles at its base, but *ex hypothesi* a lethargic child is not always lethargic—some more potent factor may for the time being overcome his lethargy. Psychologists can, however, remind us that some people are born more excitable than others and that, in the long run and on the whole, they will show this characteristic in their acts; educators must take this fact into account.

During the last few years much work has been done on temperament and almost yearly physiologists give us further

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angers and sympathies. Do you know a John Smith? And how like, and yet how different, Peter is!

Perhaps the most marked difference is in the way they take criticism; the other day their mother was really vexed with them about their treatment of their puppy, and Peter was horribly upset when she called them cruel and unkind. Not so John; he minded for the moment but then was off to work his engine, whereas Peter spent the day trying to make it up to the puppy and win his mother's approval.

Thus all people who are responsible for young children should watch their natural reaction to their environment and note very carefully the different results of a given experience on the various children. Hence the knowledge of temperament should be useful, because it directs the layman's attention to facts and normal combinations of factors that he might otherwise overlook.

But should the knowledge be used to classify each child into one type, it would obviously be most dangerous. All of us have inherited our characteristics from a legion of ancestors and the modifications of the simpler types are numerically so great and psychologically so subtle, that an accurate analysis of any individual's variations from type is certainly impossible to the layman.

In this work on temperament and all the following sections on various native endowments, the aim is to suggest to educators what characteristics they are likely to find in children and to what extent they can be modified.

TYPES OF CONDUCT

Probably the division into mental and physical characteristics will be found as misleading as the suggestion that heredity and environment can be looked on as the two factors that determine growth. But whereas some characteristics in a child are probably the result of his physical make-up and in some few cases can be modified by the

use of glandular secretions,¹ others, that impel a child to definite interests and actions, do not seem to depend on physical constituents and cannot be altered except by altering the child's attitude to life. Such characteristics are sometimes called innate tendencies, sometimes instincts, now, more frequently, conditioned reflexes. McDougall, in his *Social Psychology* published in 1908, revolutionized the training of teachers by his insistence on the importance of these instincts and innate tendencies, as he then called them, and he still maintains in *An Outline of Psychology* that these endowments are the *fons et origo* of all our actions.²

On the other hand, the school of psychologists known as 'behaviourists' deny their existence. Again, while some writers seem to evolve an instinct to explain every action, others reduce the number and Fox declares for one only!

Whether psychologists call them Instincts and innate tendencies or explain all actions as conditioned responses or reflexes; whether they make them the only cause of conduct or find some definite niche for them, they would, I think, all accept the fact that certain types of conduct are characteristic of the human race and play a very important part in the life of children. It is therefore essential that teachers try to keep conversant with the work of psychologists in the branch of their science which deals with the make-up of a child.

As this book is written, the controversy about What is and what is not an instinct, is going on as cheerfully as ever and it is difficult for the inexperienced to decide where specialists disagree. But it seems that out of the welter of contradiction the teacher can accept the following statements and build his practice on them.

¹ As is already done in the case of deficient thyroid.

² In the *Energies of Men* he calls innate spurs to action native propensities.

Two types of action can be easily distinguished from instinctive action :

Reflex Actions

like the sudden blinking of eyelids at a bright light, sneezing, breathing, &c. Such actions are almost entirely outside our control, and, what is equally characteristic, we are entirely unconscious of many of them.

Random Actions

are performed by us unconsciously and only noticed when a feeling of frustration is experienced.¹ They need only be considered here because probably out of these random explosions of energy come some actions that give pleasurable results and these tend to be repeated. Thus a child waving his arms hits a bright ball hanging from the bar of his cot and gets pleasure therefrom. He will tend to repeat that action and eventually learns to achieve from his random movements a definite result. The need for freedom of movement is clear, for this way learning lies.

Native Propensities ²

The average teacher who is not a psychologist must look for certain characteristics by which these innate

¹ A child (or adult) suffering from certain forms of indigestion must fidget or be wretchedly uncomfortable. The cure should be of the indigestion.

² Much of the controversy is over words—instinct is used by many naturalists for unconscious action. McDougall and his followers would deny that the lowliest action was unconscious and insist that instinctive actions are part of the actor's experiences, i.e. accompanied by feeling. Professor Woodworth, in *Psychology*, explains that the use of the term brings so many difficulties with it that it is better not to use it. Possibly innate tendencies meet the case. Yet there are undoubtedly such strong urges to action as hunger, sex, self-assertion, curiosity, and we do not seem to escape the difficulty of classification by refixing a name to them or lumping them altogether as reflexes.

tendencies to action can be recognized—the physical signs of a definite emotion and characteristic action. It is not easy to be sure that the incentive to action is innate in animals, but it is far more difficult in human beings. It seems safe to assert that there are undoubtedly innate incentives to action, but that intelligence and environment play so great a part in shaping our ends that all conduct is the manifestation of the interaction of the whole of our personality and our environment.¹

It seems on first thought, for example, that fear could be easily distinguished. Certain definite groups of stimuli rouse it—noise, strange sights, unexpectedly sudden happenings; there are definite physiological accompaniments: the loss of colour, the increased rapidity of the pulse; there is the definite action of running away. Moreover, it can be studied and experienced in its extreme form of panic. Yet psychologists after very careful work find there are only two innate causes—loud noise and fear of falling—and that it is suggestion, imitation or experience that has given rise to all other fears. Nor is running away the characteristic action in a modern community for there are a hundred and one manifestations—the bluffing and bragging of some people, the utter incapacity to do or say anything that paralyses others, anger and even cruelty. I do not know two children who show fear in exactly the same way, and when it comes to diagnosing other innate tendencies the need for a psychologist is equally apparent.

Fear, curiosity, anger, self-assertion and self-abasement were originally classed by McDougall as instincts because they reacted to the following test, prescribed by him. (a) A similar emotion and impulse to act is observable in the instinctive behaviour of the higher animals. (b) There exist pathological states of the emotion and impulse to act.

¹ For further discussion of the problem see Ch. IV on Intelligence.

But it is most difficult to distinguish sharply between the various incentives to action ; for example, the results of curiosity seem to be just as variable, just as educative as those of play. Hence it seems as if we must be content to assume and use these innate tendencies, and zealously to guard against the illogical absurdity of coining an innate tendency to explain conduct that we are too lazy, or ignorant, to analyse.

McDougall, in *The Energies of Men*, suggests eighteen innate propensities¹ ' that are the very foundation of all our mental life producing the driving forces . . . manifest in all our activities from the simplest to the most complex '.

But in this brief study of children we can only consider those which are most directly relevant to our purpose of finding sound bases for educational practice. Thus though we should all acknowledge that it is natural for a child to cry aloud for help, to laugh at the failures of others, to seek for comfort, we should not base educational theory on these characteristics except, perhaps, negatively in the sense that such actions must be assumed to be natural and not punishable. We only stop laughing at other folks' stupidities, if we ever do, as we realize how hurting laughter may be. Again, a teacher nowadays would not punish a child for seeking sleep, but he would try to find out why this child seems to need more sleep than others of his age and remove the cause.

Fear, self-assertion, the sex propensity, curiosity, parental and gregarious propensity, submissive propensity, anger, zeal for possession and construction all play their part in the child's reaction to school and home life. Last but not least there is the child's passion for play, and though McDougall refuses to accept it as an innate propensity, nevertheless it is such a natural mode of conduct, so valuable a method of acquiring knowledge, that it must be studied carefully.

¹ See *Energies of Men*, pp. 92-8.

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In this section, however, it must suffice to deal with fear, self-assertion (and the negative feeling of inferiority), anger and sex. Curiosity, love of construction and play, and zeal for possession are at the base of the learning process and are better considered in a later section,¹ while the desire to share the experiences and life of one's fellows will be considered in connexion with the child as a member of society.² There is no logical justification for such a treatment, but it is hoped the arrangement adopted here will help the reader to see each child as an individual and later to consider him in his relation to his fellows.

FEAR. Dr. Hadfield states that 'the function of fear is to provide the body with mobility and muscular tone and the mind with alertness to meet danger'. The protection of civilized life leaves us with little to fear and, therefore, with enormous capacity for fear.³ Hence, he asserts, we develop all sorts of fear or phobia in which fear is attached to objects not intrinsically dangerous to life as is the case with natural fears. In addition to natural fears and these phobias, there are anxieties which he defines as 'fears without an object', usually due to some mental disturbance. As in more or less mild form these phobias and anxieties often make life a terrible problem for the badly handled child, it is important to study how to avoid introducing them.

To a child brought up in a civilized community there are very few necessary fears. The fear of falling can be dealt with easily if a child is encouraged to climb and scramble and shown what will happen if he does not use his judgement. Actual feeling of fear only makes a situation more dangerous. Thus the Russells finding their boy, aged two and a half, unduly careless in his play at the edge of high cliffs explained to him, at a time when they could explain and not communicate fear, that he

¹ See Ch. II.

² See Ch. X.

³ *Psychology and Morals*, Ch. XXI.

would break like the plate he had just seen fall if he fell or jumped over the cliff. The fact to observe is that they tried to make him realize consequences without acquiring a feeling of fear. In the same way we must all realize the probable results of unobservant and unintelligent crossing of roads, but fear of the dangers is far more of a hindrance than a help.

Probably the greatest preventive to fear is physical activity, and if from the earliest days we train children to do things carefully and make no undue fuss about misadventures, they will probably acquire caution and escape fear. That physical activity is a prophylactic against fear is seen in the attitude of two equally good drivers, one driving and the other riding in a car. They are both, *ex hypothesi*, equally aware of the dangers, equally trained in careful driving, yet it often happens that the passenger not only mentally drives the car but also instructs the real driver and thus possibly adds to the danger of both. The driver is free from fear and busy with the manipulation of his controls; the passenger, equally free from fear when driving, is as an observer a prey to it. If any readers have wondered why such a passenger should insist on making himself a dangerous nuisance, he can take the story to himself and see if he is not in his dealings with children making a similar mistake. Thus we want children to do things, to clear tables, cut flowers, make boxes, put china away, climb trees, be helpful in every possible way and experiment in all possible departments of life. We want them, in other words, to be fearless. But most of us instead of showing a child how to carry knives so that they won't be horribly dangerous if he falls, prevent his using them or say (like the passenger), be careful. So with everything—his carrying of our best china, his using paint, his making blots, his early work in arithmetic. And before we know the child has acquired either or both of the two most haunting and exhausting of fears—fear

of personal danger and of making mistakes. Personally, I would rather have all the china in my house smashed, all the paper in a schoolroom spoiled, all critics appalled at the written results of my teaching, than one little child be changed from a brave and adventurous helper and experimenter to a timid disciple.

McDougall includes in his account of innate tendencies with no specific emotional characteristics imitation, suggestion and sympathetic induction of emotion. In words of the class-room we might say a child has a remarkable power of imitating, both consciously and unconsciously, the actions of others and of 'catching' ideas and feelings, as a rule unconsciously, from the people with whom he lives. Hence, unfortunately, most of us inculcate children with our fears and anxieties, for a child catches our feeling of fear even though we do not openly express it. If a teacher gives a child scissors with which to cut the lavender and is afraid while the child is doing it lest he cuts himself, it is as likely as not the child will feel frightened and more perturbed because he does not know the cause of his teacher's fear. Hence the obvious rule is to advise a child of danger only at such times when one is not feeling the danger.

For instance, to frighten a child about crossing roads is a very different thing from training him to cross with care. When a child is so young that his interest in traffic is not aroused, the habit must be acquired of stopping at every crossing. No older person should tell a child to hurry across the road in order to escape oncoming traffic, and the rule should always be to wait until a child can cross with no sense of hurry or fear. When there is his interest in trains and buses to build on, he can soon be made to see that they have fixed stopping-places and fixed rules for progression. Pedestrians must play the same game and the fixed stopping-places are just before crossing the road. As soon as possible he should learn the rules

of the road, when to look right, when left, what happens to traffic turning out of a main stream and so on. Most people cease to fear situations as soon as they understand them sufficiently to feel that they can deal with them.

It is pitiful to think how many girls have had weeks and weeks of worry—another form of fear—because they must pass an examination in mathematics. Here again bad teaching is the cause, and far too early did that bad teaching begin. It is not sufficiently recognized that success in teaching any subject is at base far more a matter of sound psychological theory than of special rules applicable to one branch of teaching. A child's dislike and often fear of mathematics has its origin in a feeling of being faced with something he can't understand and can't do. If when he fails to accomplish a task, obviously impossible for him, he is scolded or punished, then to the initial feeling of bewildered fear is added fear of punishment. If every teacher of mathematics would refrain from class teaching, take children only in groups when they wanted help over some point, patiently go back to the simplest point until it was understood, we should not hear so much of those people who say in sheer self-defence to cover up their mistakes, 'I never can do mathematics', and sometimes add, 'none of my family can'. The normal person with good sensible teaching can do elementary mathematics and get that amount of satisfaction which accompanies work that can be proved to be correct. Let a child learn the first main rules of arithmetic through community shops, post offices, &c., let him come to the generalization as a simplification of his own experience and not as a superimposition from above; let his mistakes be looked upon as lapses of knowledge or a sign he needs more practice in a particular operation; then he will go on from step to step steadily and happily. But if his teacher is worried, either because she is confused over the process or because

she fears blame should her pupils do badly, then the more sensitive children—the type that needs most self-confidence—‘sense’ the fear and begin to do badly.

Specific fears are bad enough, but the state of general fear that Dr. Hadfield calls anxiety is far worse, for it lowers physical vitality and spoils a great part of a child’s waking and, indeed, sleeping life. It is a more common state among delicate or sensitive children than most of us realize. A friend confessed the other day to a constant anxiety during her childhood lest her mother died, another to dread of ridicule in games or during oral lessons, a third to fear of bleeding to death—an explanation of the absurd fuss we all thought he made when he cut himself. And there is also the even more generally anxious child—worried if he is asked to do the simplest thing, worried if he is ignored, afraid that he is forgotten if he wakes early and no one tells him it is time to get up, terrified lest his mother won’t return when she goes out. It used to be more easy for those in charge of children to take such fears lightly on the ground of their being childish fears that would vanish rapidly. But most modern psychologists insist that a great number of the nervous disorders that show themselves in adult life had their beginning in such states of childish fear and anxiety.

The more one works with children the more one is inclined to agree with McDougall that fear is an anachronism and the greatest curse of modern life.

As fear saps energy, it is of great importance for that reason alone to let children grow up fearless; but there are other reasons. Absence from fear means presence of self-confidence and a willingness to experiment, both in imitative and creative work, that leads to surprising results. These excellent results are obtained when formal training gives place to self-imposed training, as in projects or in work voluntarily undertaken, not only because the child is interested but also because the fearless

child has much more energy for creation and adaptive imitation.

In schools where free work is the rule, teachers nearly always find that it is the so-called dull children who profit most—especially in arithmetic when fear hampers the nervous child. Thus in a class of children who organized a post office and who did all their arithmetic in connexion with it, those who improved most were those who were poor at the subject. The reason was partly, no doubt, because as they wished to calculate quickly and accurately they put in hours of practice outside school, but also because they approached the work in the spirit of play. They associated pleasure and freedom with play and had no dread of making mistakes. Professor Cizek's children are another case in point. Not all art teachers can be a Professor Cizek, but all can encourage creative work, give technical training only as the children feel the need of it and, above all, chase fear from the class-room. If a child is doing badly at school and his intelligent quotient shows him to be normal, one of the first questions to ask is, 'Is he afraid of any one or anything?'

It will be easily seen that a teacher's attitude towards the problem of a child's fear will colour the greater part of his professional work. If he feels as McDougall does, no desire for results will induce him to use threats or punishment, and when, as is often the case, he inadvertently frightens a child he will do his best to minimize the mischief. To the over-sensitive teacher of little children one warning is necessary. However greatly she desires that children shall grow up fearless and assured, she is defeating her own ends if she gets into that state of mind when she is constantly afraid of frightening them, of hurting their feelings, of thwarting them or of giving them the wrong sort of help. Such an atmosphere of nervousness and undue caution is felt by the children, and for this, if for no other reason, is to be avoided. To grow up amongst people

who are willing to take risks and who face the ordinary problems of life with that gay courage that all should strive to attain is a great advantage.

What finally is to be the treatment of the child who has already acquired many specific fears and now adds that of the unknown school life to his list? There are many such children and their reactions to the problems that face them on the first days in a new school or in a new class should be carefully noted. Indeed, Adler¹ maintains that a child's behaviour during his first few days in school is the key to his pattern of life.

It is impossible to deal with this subject satisfactorily, for the teacher must select the best method at her disposal to put the child at his ease and to give help towards his overcoming nervousness; one must know the child before one can suggest a treatment. A very good plan is to leave a young child to his own devices; let him wander from one group of busy workers to another, play with toys, select his own seat, &c. The teacher should try to accustom him to her voice and manner, by addressing friendly but casual remarks to him. Often after a day or two of such treatment the child will volunteer a remark or ask for help in some piece of work. And yet a highly nervous child, or a child who is old enough to have definite views of what treatment he should receive in school, may get no assurance from this neglect. Indeed, he might feel that his teacher had forgotten about him and that the ordeal of his first day's work was still to be faced. Nothing but sympathetic imagination, fortunately a capacity that can be improved by use, can help a teacher to find the correct solution of this and similar problems.

SELF-ASSERTION. Most psychologists, though not all, agree that there are such entities as innate fears, but the many other characteristics that were formerly called native endowments or instincts are now more usually assumed to

¹ See *The Education of Children*, pp. 49-51.

In some cases a trained psychologist must effect the re-orientation of the child's activities, but in many cases the parents in co-operation with the teacher and children can change his outlook.

ANGER. The more self-assertive a child is, or the more he is absorbed in what he is doing, the more intensely does he resent being checked. It is generally asserted that the emotion of anger and, in untrained people, the action of hitting out, are the natural reactions to being baulked, and obviously the keener a child is on what he is doing the more angry he will become on being checked. So far the explanation of anger is clear—it is as though some channel must be found for the energy that the obstacle checks and it is found in tears, stamping, kicking, &c.

The cynic might say that why we so seldom see signs of real anger among the children in school is because they are never so absorbed in their tasks that they resent our interruptions. At any rate it is an observed fact that children in the freer atmosphere of home or playground or small school do display anger far more frequently than in the large disciplined school.

In the same way A, who must check anger when his employer baulks him, will work off his pent-up feelings on his friends and family.

The teacher who loves peace and disbelieves in righteous indignation is in a dilemma, for on the one hand he is faced with the fact that anger is a natural reaction and though it may seem to be stopped it may break out again in a more dangerous form; and on the other by the easily observed fact that if it is not checked it tends to become a weapon constantly used for getting one's own way. What is to be done? In the first place, whenever possible, causes of anger should be removed; it is unwise to interfere between a dog and his bone or a child and a great interest. If, for example, a child must give the new toy to another he should be warned that in five minutes his time is up.

In the second place, here as elsewhere the educative process must give the educand help to overcome the anti-social reaction. Anger should never pay and the mother who says 'No' but gives in, on being faced with a paroxysm of rage, is only encouraging a bad tendency.

Perhaps the only possible education is given indirectly: if a child lives among people who do not indulge in anger or, when they do, are frankly sorry and do their best to make amends, he too will try to cope with his temper. However, one should no more argue with an angry child than with an angry bull, and when the child becomes angry, though perhaps the old-fashioned method of isolating him has its dangers, on the whole it must often be used for want of a better one. The half-way house is for the mother or teacher to stay with the child and go on quietly with some work, so that he does not feel utterly deserted. When he calms down he can be helped. There is nothing so devastating to a certain type of child as anger and if some friendly soul is not by to show affection and forgiveness at the first possible moment, the child may feel he is an outcast.

It is depressing to think that so many children suppress anger, not because it seems to them silly to lose self-control but because they are afraid of the consequences. No mental habit of control is gained that way, for when fear is removed anger is again a weapon that may be used. It is for this reason that certain difficult children should be brought up in small home schools and no child, if it is humanly possible to prevent it, should be educated by frightening parents or teachers.

Much still remains to be done on secondary expressions of anger: the angry baby kicks, screams, bites, cries; but a child soon learns to control the cruder forms of pugnacity. How he expresses it seems to me to depend greatly on his temperament. Thus the choleric child before he is aware will speak angrily, the sanguine child, with a better balance and probably more means of expression at his disposal

will be more slow to anger. The lethargic child may be even more slow, but he is also less inclined to be actively expressive. Hence a child who seems sulky should be watched carefully. If he has been baulked in one of his greatest interests, and it must be remembered that such children do not acquire interests easily, he will brood over his misfortune. It is, of course, unfair to such a child to let him use sulkiness as a means of getting his way, but it is also unfair to resent natural expression of a baulked desire. If possible he must be helped to overcome the attitude and it is doubtful if the usual custom in schools of leaving the sulky child severely alone is effective, at any rate when he happens to be more interested in himself than in his fellows. On the whole it seems advisable for the teacher to assume that the child recovers control quickly and to find something for him to do that will take his attention from his hurt feelings.

In a class where children take active responsibility for their own work and the call for help or suggestions is frequent, anger is less serious than in the disciplined class; the child soon realizes that when he is baulked the fault is partly his—he has built his town in a place where others must work, he has tried to solve his problems carelessly and too hastily. Also he in turn causes anger by disturbing some other worker and he knows he did so unwittingly. Nor is it sensible to go away and sulk when one desires to get on with one's work. Hence the value of schools in which the children take a great share in teaching themselves and consequently have less work imposed on them.

SEX. There seems to be a consensus of opinion amongst psychologists that an interest in sexual life is normal in young children. Most people who have been to large schools know that from time to time children of all ages discuss the sexual life of adults, and, in some cases, imitate it. Many parents and teachers refuse to believe this statement in spite of the ever-increasing evidence adduced by

psychologists, while others behave as though a child is polluted who shows interest, and almost untouchable if he has sexual practices. This attitude seems to me calamitous, for as soon as one type of child finds that he can in any way shock his elders he gets a feeling of power, and though the punishment for the act may be so heavy that he will not risk being found out, he will practise secretly masturbation or exhibitionism or whatever form it takes, and will as likely as not give other children the habit.

Most children grow out of such habits if there is no fuss made about them and if their life is full and active. The physical dangers of masturbation, for example, can be grossly exaggerated; a child's desire to undress in public will fade away if no one finds it especially interesting. Thus in one very poor school where a teacher found the children undressing in a cloak-room, the suggestion that it was a cold job and that it would be better fun to see how many people they could represent by dressing up led to a rush to the property box. In another school where a harassed teacher, much to her regret, said impatiently to a set of children 'I won't have this' and locked the cloak-room, the habit did not die out. Indeed, the most difficult child of the group, who was attending a psychological clinic, on being asked what he liked doing most at school said 'undressing in the cloak-room' and gave as his reason that his teacher disliked it.

The harm that is done before children come to school is often great, but teachers can help a child in his difficulties only when they can free themselves from acting as if any interest in procreation or birth was unnatural or even sinful.

A great many people believe that if children are brought up naturally with pets to look after they will acquire a knowledge of the facts of birth easily or happily. It does not necessarily follow, for boys brought up on a farm can be as foul-mouthed over the sexual life of adults as the most ignorant Cockney, and the child in the one-room

tenement who knows more about the facts of birth than many a teacher does is often acutely interested in them. Indeed, sex is naturally interesting to most people as the number of novel readers and play-goers testifies.

Why, then, try to ignore the interest and fob children off by very elementary and often inaccurate biology lessons? Surely, if their first questions are answered, surely if no mystery is made about the whole process, the healthy child with a full and busy life will no more brood over sex than do his elders. The unhealthy child who is the habitual masturbator needs help and not punishment. Probably a psychologist will be of far more use to him than his parents or teacher.

CHAPTER II

NATURAL INCENTIVES TO LEARNING

IN this chapter we are still mainly concerned with a child's native endowments, but it may throw a new light on those described in Chapter I and give additional help to teachers who are trying to formulate principles of education, if we consider the working of certain native propensities. For this purpose curiosity and construction, a sense of ownership, individual and corporate play have been selected.

CURIOSITY AND CONSTRUCTION

We used to be told in our young days that curiosity killed the cat, but of men it has certainly been the greatest teacher throughout the ages, for to a great extent a history of discovery would be a history of the working of curiosity. To suggest to teachers that it should be used as an incentive to knowledge is to narrow the field of its action greatly, for, whether teachers use it consciously or unconsciously, the normal child spends a great deal of his time satisfying his curiosity, in other words acquiring knowledge for himself.

Much can be learnt of the nature of a child by observing on what he exercises this urge to learning and what tools he uses in its service.

The very young child's chief tools are his eyes, mouth and hands. His first interests are nearly always his own body and such things as he can handle or put in his mouth. Mothers generally say that a child is cutting his teeth when the stage comes for tasting everything, but it is not only

teeth-cutting that is causing this use of tongue, lips and gums. A little child has comparatively few ways of learning—his hands are unskilful, his eyes see, his ears hear, but his mind cannot interpret many of the experiences; but the senses of touch, warmth, cold and pain, in addition to the actual sense of taste, and the sense of smell, are stimulated each time he puts a thing in his mouth. The sense of taste is very sensitive in childhood; indeed, it is more sensitive to some stimulants than that of an adult.

Smell also is acute in young children and hence to say 'don't touch, don't taste, don't smell,' is equivalent to saying 'don't use your most fully developed senses in the service of your most forceful urge to knowledge'.

It is generally assumed that in primitive society hunger and the need of protection gave the main impetus to knowledge, but for the average child of to-day the necessities of life come with little personal effort; hence if he is not allowed to satisfy his curiosity, he will grow up with little or no intellectual interest in the world around him.

It seems, then, that the problem that besets the educator of young children is to surround him with things that will be likely to rouse his curiosity and let him educate himself.

As a matter of fact, this plan has excellent results, and many of the children who have lived a full life, that is have done what they liked provided they did not make themselves too great a nuisance to other members of the community, have laid a far better foundation of knowledge than the child whose life is carefully organized both at school and at home.

In other words, before we can interest a child in the three R's and the various branches of education that these skills make possible to him, he must have a good deal of knowledge of the possibilities of his body and the properties of his environment both social and physical. He must learn by experience what he may do, what not, to men, children and animals; what use he can make of clay, sand,

salt, sugar, wood, iron, &c. He must learn to find his way about the house, garden or neighbouring streets ; to climb, if possible to swim. Clear speech, rhythmic dancing and music are to the little child more necessary than formal lessons and, above all, that feeling of assurance and power that comes from achievement. But achievement for the child, who is at the stage when things interest him and ideas pass him by, results from successful efforts to do or make something ; for him true learning can only come by doing.

Probably the desire to make was in primitive times closely associated with the need for protection and food ; yet even primitive pots are decorated and the ceilings of the caves of Altamira give evidence of love of doing for the sake of doing. In children of to-day it is the most patent way of satisfying curiosity and it is doubtful if any amount of book knowledge can take the place of constructive effort.

This fundamental condition of learning to live is recognized in the good kindergarten and infant school that are work-rooms in a real sense. Here the children hammer and saw, pound clay and paint all manner of things, sew and cook. So necessary is constructive work to them, that in nearly every game that they invent more time is given to the actual preparation than the playing out the idea. Thus a telephone system may take days to make and be played with for a few hours ; a hospital needs beds, quilts, uniforms for nurses, a flower stall, &c., and the actual game is played with more persistence because it too is constructive—bandaging, mixing medicines, making charts, &c. In all such constructive work the need for knowledge is soon felt, and somewhere round the age of six, children begin to acquire reading, writing and arithmetic. In no case do they move to the upper school with less formal training than children from other schools ; and in every case their background of knowledge is more

varied and more secure and their attitude towards school work free of fear.

Curiosity and a need of construction do not cease at about the age of seven, nor is a child of that age ready for the formal teaching of subjects so often demanded in junior schools. In such schools as have left the children free, it has been found that the amount of self-education a child acquires by running a magazine, organizing a puppet play or dramatizing a story is far greater than that of the child who is subjected to lessons in English history, geography, &c.

In the few entirely free schools for children under seven with which I am acquainted, children over six have a time set apart for formal and practice lessons,¹ and the need for more precise knowledge would show itself as children grew older. In the junior school more time could be devoted to school subjects, but the dominant centre of interest of such children—imitative social plays and dramatic self-expression—should be developed and used as the spur to learning. Thus such a school should be full of activities—picture exhibitions, fairs and pageants, geography exhibitions and travel agencies, concerts, printing and publishing house, &c. ; obviously such multifarious occupations would need a counting house and quite probably a municipal government.

It is only as the child's natural incentives to learning are thus utilized that he will realize the value of learning. Most people are not born scholars and all but the born scholar, whatever that term implies, are more likely to be put off learning by spending from seven to fourteen or sixteen in a formal school than to acquire a love for it. Hence the multitude of folks who give up any kind of serious reading as soon as they leave school. And yet nothing may be more useful than to turn one's mind to

¹ See for a fuller account of the work, *Modern Education of Young Children*. Ed. N. Catty.

a mathematical puzzle at certain times of life, nothing more lastingly satisfying than a love of poetry, music and the world of nature. It is on such lines of 'natural education' that the schools of the future will be run, and it will not be the first time that teachers of older children have adopted methods tried out in the junior schools.

PLAY

If people would once for all accept that children have natural and sensible ways of teaching themselves and that to a great extent the need for teachers arises from the fact that modern children have to adapt themselves to the demands of the complex and exacting modern state, there would be no need to write on the educative value of play.

It really is of no great importance for a teacher to make up his mind whether play is an instinct or an innate propensity, whether children were given their youth in order to play, or play as a preparation for adult life; but it is important to face the fact that it is as natural and necessary for a child to play as for him to satisfy the demands for food and drink. If he can't get food legitimately the temptation to get it illegitimately is overwhelming and the statement is equally true of play. Hence the value of the constructive and imitative plays discussed in the preceding paragraphs—they satisfy his need of play; also the child thus satisfies his curiosity and uses his constructive powers, just as in his earlier curiosities he began to train his senses of taste, touch, smell, &c.

The need for all types of play in the junior school as well as the infant school has been stressed above, and the tendency to consider that organized games, like netball and cricket, take the place of the free play of younger children will disappear as the possibilities of free play are more fully appreciated.

The probability is that certainly in most boys' schools cricket and football are played according to rule too early. It is delightful to watch a set of natural little boys of seven with a football; they throw it, kick it, roll over it and sit down when they are tired. There is no idea of playing a team game, and to try to compel young children to play by fixed rule before they have a feeling for their community, generally called the herd instinct, is as wasteful of time as to try to teach reading before a child wants to read.

As children get into their teens the actual acquisition of knowledge in many cases becomes their absorbing interest and in some cases they look on play as childish. In the school where prowess in games is as important, or even more important than intellectual distinction, such children may be very unhappy, and they may either force themselves to play at great cost of energy or become rebels and acquire a feeling of critical opposition to their society.

It is deplorable that some of the most intelligent of a community should either be looked down on by their fellows or look down on them, and such a situation could be easily avoided if the fact could be accepted that there are at least as many ways of playing as of writing tribal lays. Thus a boy who is bored to death at his school because he cares very little for the formal work, and even less for cricket and football, never knows a dull moment during holidays when he can work on his garden and develop a nurseryman's business on the plan of barter with neighbours. His catalogues, hand-written circulars, and account-books put his school exercise-books to shame.

It is a pity that, on the one hand the very brilliant child, on the other, the ordinary child, with practical interests and no zeal for the conventional amusements of a school, should find so much of life tedious during his most formative years.

SENSE OF OWNERSHIP

About the age of three many children begin to be possessive about their toys, and mothers complain that a child is growing selfish. If no obloquy is attached to the word, it is true that the child is growing selfish in so far as he is realizing that he is a person, that his acts can influence his community, and that he has rights.

Many experiences are responsible for this slow growth of power and independence; the child can walk and wander away from others; he can express himself clearly and effectively, and though, as Piaget points out, he still thinks that all people think as he does, he constantly has experiences that help him to make a sharp distinction between himself and not himself. It is at this time that he begins to want things for himself and that we find him not only guarding his possessions but collecting in order to add to his store.

Some psychologists declare this desire to guard property, by fighting if necessary, is innate, and Rivers calls it an instinct. Certainly many animals display the same anger at being deprived of a possession as a child does from whom a toy is taken, and certainly we must face the fact of love of possession in children who are old enough to distinguish mine from not mine, for it influences in many ways a child's attitude to the world.

In the first place children who live in old-fashioned institutions where private possessions are not allowed, and where they have no boxes in which they can safely keep their own things, get an exaggerated view of the value of having goods of one's own. They go to curious and distressing lengths to acquire and hide even worthless things and they are almost incapable of giving. The child in the poorest home is better off in this respect, for he generally succeeds in possessing some odds and ends and learns at least to 'swop' a tin with a hole in it for a cup without a handle.

Secondly, there is no way so effective of teaching care and respect for the property of others as to have treasures of one's own. The child in the elementary school is often reproached for being careless with pencils, pens, paper and books; while the child in the fee-paying school, who is the proud possessor of his own pencil, india-rubber and text-books, often loves them and guards them with the greatest care.

Probably if children in elementary schools had given to them at the beginning of each term a stock of pens, pencils, paper, paints, &c., and were lent the books to be used for the term, an economy would be effected, for the children would learn to use all such things carefully. It is, of course, obvious that a man should respect public property far more than his own possessions; yet a great many do not, and one hears of folk who see no harm in cheating a railway company or using carelessly electric light in a public building who would be scrupulously honourable to a friend and meticulously careful of the home electric light. If this is true of adults, it is not fair to expect a little child to bestir himself to treat with care the property of so abstract an entity as the L.E.A.

The growth of a sense of responsibility must be through care of one's own possessions to a sympathetic understanding of the value a friend's treasures have for him; from an understanding of the need to respect a friend's property to that of caring for public possessions, because social conduct is the duty of every member of the community.

Thirdly, the attitude of generosity is acquired more easily if from the earliest days a child lives with people who share possessions with him and expect him to share his. Little children are generous and love to give, partly because it rouses a feeling of importance and causes a feeling of approval in others; but if they own so little that to give one marble is to give all, we are asking a sacrifice of them that we should not dream of demanding of ourselves.

Yet I have seen mothers insist on a child of four give up his most treasured toy to a visitor who as often as not is careless in his treatment of it.

Children should have a certain number of replaceable possessions, toys, sweets, &c., and by suggestion and imitation they should learn to give or lend cheerfully. But certain things might be considered their own and these they must be allowed to keep. In any case there seems no training worth having, or giving, in forcing a child to be generous.

As children grow older they often grow more possessive—take great care of their property and bitterly resent any inspection of it. This fact probably is explained by an enhanced feeling of self and, perhaps, of the nakedness of self if unprotected by possessions. At any rate in an acquisitive society they are apt to hear a man appraised according to the amount of his possessions.

All the bias of the school should be in favour of helping these children to learn the joy of giving and sharing. Children should be encouraged to lend and not blamed for coming to the rescue with drill shoes, &c., encouraged to share their knowledge and skill and not to collect marks and prizes.

At certain times, of course, a child must work by himself and for himself, but in the school where they take responsibility for their own work there is no difficulty in showing them when they must ask for help, when refrain, when they may work together, when alone.

TYPICAL MANIFESTATIONS OF NATURAL CONDUCT

Before we leave this preliminary survey of some of the first urges to the acquisition of experience, knowledge and skill, it might be worth while to summarize the results by considering their manifestations in certain typical children.

Take Janet first, aged three and a half, who is always

busy helping to sweep, dust or clear away or playing at house with leaves and sticks to which she gives names and tea. As a rule, she is the easiest of children to educate, for she teaches herself by her play, by the desire to be useful in the house, giving her, I suppose, a sense of power and by a happy curiosity which spurs her to watch and imitate. Thus when her Mr. Man (a piece of wood) was given a cigarette, a minute roll of paper, she insisted on putting it in the real cigarette box and offering it to him in the correct fashion. She had observed the procedure partly because of her interest in her elders; she was indifferent to the texture or size of Mr. Man or the cigarette because her interest is in actions rather than inanimate things.

Her one fear seems to be of people going away—accounted for most likely by the fact that she has lived a chequered career and must have missed more than one of the people who have passed in and out of her life. She has a very great interest in her own body and, partly because she has been constipated, she still proclaims aloud when her bowels work. A cheerful 'good' is the answer to the proclamation and she seems to be less excited about it than she was. But she is very interested in the cows and sheep's dung in the fields round her house—she lived in London till she was three—and were it not that her questions on it are answered as simply as on any other subject she would at once get the idea that certain topics are taboo with older people. Up to now she has shown little or no sense of ownership, though during the last few weeks she has developed a great interest in new clothes. With the interest has also grown a desire for attention from the various visitors. She is a charming child and visitors express approval openly, whereas her mother is serene, friendly and cheerful with her but gives her very little more approval or disapproval than she would her older friends. If teachers could see the effect of their

criticisms, friendly or adverse, as we do on Janet, they would never again indulge in that most reprehensible habit of discussing children as if they were not there.

John is very different and as he is now ten it is impossible to say what part environment, what temperament played. He is sexual in his interests and has been expelled from one school on this account ; he is sulky and not by any means truthful. His present teacher has found two ways of approach—he loves organizing the younger children's lunch and he will make concentrated efforts to build a railway. He reacted to suggestions of reading and writing with a sulky 'No' and showed no desire to surpass the younger children who all read quite fluently. But now he has to keep a list of people who have milk, and writing and reading have become necessary to him. In the happier and more natural surroundings of his present home school he masturbates less and has only been known to do so on occasions when, unfortunately, he was not supplied with work interesting to him or when a relation came to see him who had been responsible for a distinctly severe treatment of his faults.

Philip is fourteen, always in trouble at home for his lack of consideration to others, the centre of the boys' admiration at school for his capacity to act, his friendliness and his fearless criticism of masters and their ways, masters who declare he is a confounded nuisance.

He is a typical example of the child with a great love for power and desire for approval. He has unselfish parents and elder brothers and the effort to live up to their rather high standards has in all probability been too great for him—in a more selfish family he might have done better. But at school he can get approval more easily and that satisfies him. He is extremely able and he uses his ability to gain that admiration from schoolfellows that is almost always given to any one who makes those in authority look absurd.

Such slight sketches of three very different children are given to show that none of us can go into a class-room and see at once the type of temperament and the dominant urges of the children. The study of children is most difficult and complex, and though one must, for the sake of clarity, isolate such characteristics as temperament, native propensities, &c., unless the reader constantly refers back to the children whom he knows best and considers them as individuals and not as 'examples' from some text-book, he will get little help from the work of authorities.

CHAPTER III

SENSE EQUIPMENT AND TRAINING

SENSE EQUIPMENT

SIGHT, hearing, touch, taste, smell,' answers the plain man when asked for a list of the senses, while most first-year students would add a sixth—the muscle tendon and joint sense sometimes called kinaesthetic, which gives us great help in estimating weight and adjusting our movements to our purposes.

To a very large extent a study of the sense equipment belongs to the science of physiology, and though some manuals of psychology devote a great deal of space to the results of physiological investigation and to psychological experiment on time reactions, accuracy of perception, &c., &c., it is doubtful if the knowledge has great value to the teacher or should find a place in a book directly dealing with educational theory and practice. By the time the physiology of the senses has been sufficiently simplified to make it clear to the layman, most physiologists would say it was too inaccurate to be of value. Moreover, the modern work is so delicate and important conclusions so technical, that without experience of work in a laboratory the reader finds their interpretation difficult.

In this section our only hope is to deal with established facts that have a direct bearing on teaching.

On the whole modern physiology seems to leave less for education and for the more obvious sense organs to do and more for the less obvious. Thus the kinaesthetic

sense—a function of certain parts of muscle structure—is now believed to give much help with the knowledge of space as well as weight.

Sense organs undreamt of by the average man are discovered and already some physiologists hold we have ten senses.¹ But assuming physiologists know their business this trend of modern research is obviously important for educators, for if the child has a better equipment for self-education than the older schools of physiologists and psychologists believed, it is essential that he should learn in his own way and get all the help he can from these marvellous 'sense tools' with which he is endowed. Thus just as a child obviously can only learn to estimate weights and the amount of effort needed for lifting them by using them, so he can only learn to distinguish fine shades of colour, comparative sizes, differences in intensity of pitch, variations in rhythm through his experiencing these shades and differences, in other words by living an active and free life.

As in all experimental work on sense discrimination psychologists find that fine discrimination depends at least as much on interest and practice as on a good sense equipment, it seems as though the work of the educator is to decide what sense knowledge is essential and to arrange that children have such activities and occupations as will arouse in them an interest in acquiring the desired skill.

Physiologists and psychologists, then, are our only

¹ 'It would not be difficult to justify the contention that we are equipped with not five senses, but ten. In addition to the gravity receptor and the space and time receptors there are the much more familiar receptors of light and sound, the two chemo-receptors, those of taste for near objects and smell for distant objects, the tactile lengths in the skin for surface touch, the deep-seated receptors for pressure and the two kinds of thermo-receptors for heat and cold respectively.'—Quoted from an article in *The New Statesman Athenaeum* on Sense Equipment.

guides to knowledge of the construction and modes of functioning of the sense equipment. It is for educators to decide what are the best methods of training, and what are the aims of all formal work. Hence it is they who must select which of the findings of these two bodies of workers have so important a bearing on the work of educators that they must be recorded into such 'guide books' as the present.

Many men, many opinions, and the reader who wishes to decide for himself on the question of values must work through the sections of the books suggested at the end of this chapter. To me the following points seem to be most important to teachers.

GENERAL CONDITIONS OF SENSE TRAINING

It is undoubted that the foundation of a great part of our knowledge is sense experience, and though through interest and training we can make far greater and more skilful use of our senses, nevertheless the equipment with which we are born will always influence our power of learning and very often our capacity for acquiring some trade or profession. Thus a short-sighted man is debarred from becoming an engine-driver and should he become an artist his subject-matter and treatment thereof would show the effects of his limited vision. Again, a child who has a strong desire to construct and has sensitive touch will probably prefer work in clay to drawing or painting, while if he has acute hearing and a sense of rhythm he may find greater satisfaction in music. A teacher should know what is the best sense of each child, partly to ensure that the greatest possible advantage and pleasure are derived from it, partly to encourage the use of the others as far as time and needs will permit.

Though sight and hearing have always been given pre-eminent consideration in education, no sense is unimportant.

ant, and the kinaesthetic sense experienced in all forms of muscular activity has been unduly neglected. A child must learn to get some idea of the meaning of space by running and walking, of weights by lifting them, of slope by climbing. Nothing but experience makes it easy for the surveyor to approximate the acreage of a field or the height of a hill. Touch also is a useful servant, and the teacher of drawing often finds that a child who cannot draw curves is helped greatly by feeling the shape with his finger.

The case of touch helping sight is only one of the many examples that could be adduced to show that sense equipment works as a whole ; when interpreting any experience our eyes help our ears, our sense of taste, our sense of smell, and so on. This is one of the reasons why it is unwise to give formal training by isolating a sense and exercising it separately. What is essential in education is to prepare the child to interpret the sights and sounds that are in his universe, and in normal life he will have to decide what he is handling not when he is blindfold but when he can see it, smell it if necessary, and hear what sound it emits.¹ Perhaps the sense that is most justifiably trained in isolation is sound, for it often is thus relied on or enjoyed. There has, however, been a long controversy in *The Times* during the last few months as to whether the sight of conductor and performers does or does not enhance the pleasure of music.

The justification that is often given for isolating a sense and subjecting it to formal training is that only thus can the educator be assured that each sense organ has sufficient exercise, and the tendency to rely on one's best sense, or senses, is kept in check. Unfortunately there is no psychological proof, in fact the evidence is mainly in disproof, of the assumption that because a child has been trained to distinguish the noise of stones in a can or to match fine

¹ For further discussion or formal training see p. 46 and pp. 176-8.

shades of coloured cards he will use his sight or hearing more skilfully in everyday life.

There seems only one safe way of training a child to use his senses to the best of his ability on all possible occasions: to surround him with such interesting things to do and think about that he will need to use all his 'sense-tools' to the best of his ability. Thus jig-saw puzzles give more training than insets, for the shapes are more varied; cooking gives a varied training in weighing, judging heat, texture, smell, sight and taste; any form of modelling or painting a varied training in matching colour, seeing form and knowing it through touch and so on.

Though a child is born with a defective sense equipment, a good education will enable him to make the best of it and often he outstrips a better-endowed child, because he is more interested and makes greater efforts to improve. For example, a child who sees badly and relies on his hearing may have very great difficulties with spelling, but once he has been persuaded that he must look carefully at the shape of the words he has misspelt and aid his eyes by saying the letters aloud as he looks, he will improve rapidly. To a certain point education must ensure finer discrimination of the sense experiences that are valuable to each particular child; finer discrimination is a matter of interest and practice.

NOTES ON SPECIAL SENSES

Colour Sense

On the whole, experiment goes to show that children prefer red and yellow to blue and green, and hence their failure to distinguish blue from green may be due more to a lack of interest, as when tested they seem as capable of recognizing shades of blue and green as red and yellow.

There is still uncertainty among experimentors as to how far the name of the colour helps a child to recognize

the tone; some maintain children only recognize as different those colours of which they have learnt the name and indeterminate shades are disregarded.

This point is only raised because it suggests that it is wise, if we want to help children to discriminate one experience from another, to attach a name as the experience arises. Such words as names of colours, types of touch-sensations, sounds of bird calls, &c., are all best learnt thus.

Auditory Sense

Children vary greatly in their capacity for recognizing tone; musical children often can sing a tune before they can speak distinctly, but most children who enter school at five cannot recognize differences in tone or remember simple tunes. Indeed, Stanley Hall, on the results of an investigation in a group of schools, asserted only 36 per cent of entrants can sing a song or part of a song that has been sung to them.¹

There is at any rate a considerable amount of evidence that little children should not be worried to acquire perfect accuracy even in simple melody. The method, commonly used in good schools, of leaving children free to draw or paint how they like and what they like till they ask for help should, it seems to me, be far more often used in early work on music. It is true that it is more distressing for the teacher to hear a child making his own tune, either with the aid of a toy or vocally, but many of us who had that freedom can answer for the joy in the process and pride in the tunes we made. Most children from three to six delight in the game and as by practice their ears gain power to distinguish difference of tone and pitch, as their muscles reproduce more accurately the sounds they wish to express, they imitate with great care the songs they hear and the noises of school, town, home and country.

Much work is yet to be done on children's power of

¹ *Aspects of Child Life and Education.*

hearing, but teachers are safe in any method that arouses a child's interest in the sounds around him and encourages him to reproduce them. Musical teachers must not be too sensitive either about the type of sound enjoyed or the way it is imitated.

A constantly imitates motor-cars, trains, &c., while B sings his own compositions and C imitates 'the orchestra' which his father plays in, stopping to say which part he is singing. His horn is a thing to marvel at. Yet none of these children sings the simplest of songs accurately without practice.

After six years old, however, children seem to improve rapidly in tone discrimination and reproduction and make marked strides in music until the age of their second teething, when they seem less sensitive, and again at puberty.¹ But experience seems to show that at these periods growth on many sides slows down and less should be expected of children.

Perception of Space

Much work is being done by psychologists on this aspect of knowledge, and for the theory of space perception perhaps readers can still do no better than study Stout's *Analytical Psychology*, but the direct bearing on methods of education is, however, small.

Teachers should recognize that actual perception of space is of enormous importance as a fundamental condition of most of the activities of life, and that a great many of the habits acquired mainly in school depend on distinguishing special relations—reading for example. The perception of actual space, e.g. the distance of the wall from the fire, the tree from the house, the house from the school can, it seems to me, only be developed by force of circumstances compelling a child to be self-reliant. Thus

¹ Gilbert's *Experiments on Musical Sensitiveness of School Children*, quoted by Rusk in *Experimental Education*.

children who have to see themselves to school have far more idea of the relative positions of houses, streets, &c., than the child who is taken to school in a car. Children playing happily at their own games in a somewhat crowded room get extraordinarily skilful in avoiding interference in each other's games. As they grow older, given right conditions, discrimination is based on greater experience and becomes more acute.

The representation of space pictorially or by any form of diagram is a more complicated process. I do not want to insist that the one-inch Ordnance map is of no value till a child can form an estimation of what a mile means, but certainly pictures, models, maps, diagrams mean more in proportion to the child's actual experience of space, and it is very doubtful if the mental picture resulting from a model can give any accurate idea of the actual object unless some special form of training, which aids such interpretation, is given.

This form of training is possible and, indeed, essential in schools, but it takes time and puts off the more formal teaching. To take an example from geography: no child, it seems to me, should use a map until he has 'drawn a picture' of his journey from home to school, of his bus ride on Sunday, has climbed a hill and seen something of the lie of the land. Just as a child must have some vague memory image of an object before he can recognize the picture of it, so, surely, he must have some idea of country before he makes plans, and yet more experience before he is asked to read maps.

It is doubtful, according to Professor Rusk, whether children can actually interpret the story of a picture much before seven, a fact which suggests children need far more help in looking at pictures than is generally given them. If a teacher tells of King Arthur's taking Excalibur from the stone and then shows a picture, naturally the children recognize the situation. But it is an interesting fact that

the average child of about eight seldom shows any insight in interpreting the situation depicted in a picture, unless he has been trained to look and to put two and two together.

It is important that teachers who rely to any extent on pictorial illustration should help children to contemplate pictures and to turn over in their minds what each part of the picture means. It is obvious that with young children the subject of the picture should be simple events in which they are interested. But children who have been encouraged to ponder on pictures, poems and music learn to enjoy the process; by the time they reach the senior school they will realize the pleasure that is to be gained by dwelling on a work of art.

Perception of Time

A clear perception of time is apparently far more difficult to obtain than that of space, partly perhaps because, even to the aged, a day may be like a minute or a lifetime.

A child can easily estimate short intervals of time, for he shows himself able to step easy rhythms or tap at a given rate. Again, the average child of six finds no difficulty in using the word yesterday or to-morrow accurately. The appreciation of long periods of time seems to come later. Rusk quotes cases of children from eight to fourteen who were still hazy about the length of a day, but that may be because day is used in different sense—the school day, day time (for light time), &c. Neumann maintains that any understanding of historical time is almost impossible. There is a fair amount of agreement on this point by experienced teachers, and the boy who thought all the ancients lived at the same time was probably only making explicit what is implicit in many children's minds.

Time charts do undoubtedly give children some idea of temporal relations: 'William I conquered England before John signed the Magna Carta', wrote a child, 'because he is higher up on the chart.'

The understanding of time is made far more difficult because the unit most of us know best is that of our own life and that is in a perpetual state of flux.

In schools the problem is most important to teachers of history ; but they will have real psychological backing if they postpone the problem of accurate chronology, certainly until their pupils are in their teens, and in the junior school content themselves with telling stories of adventure, describing how people lived long ago, &c. If children must be taught chronology before fourteen there is much to be said for working backwards.¹

SUMMARY OF CONCLUSIONS

(1) Perhaps the most important fact for us all to act on is that our knowledge of the outside world is entirely circumscribed by the peculiar equipment of our receiving apparatus or, in more usual terms, our sense organs.

(2) The importance of using them in the best possible way is obvious, and here nature is not always the best guide. Though a man cannot alter his receiving apparatus he can, by taking thought, make better use of the impressions transmitted to him, and he can use a sense which left to himself he would ignore—as for example the sense of colour.

(3) So important does the sense training appear to educators that there are constant discussions on the most effective methods of training. There are two main schools : those who believe in formal training, and those who believe in free education which provides plenty of opportunities for all kinds of sense experience. Most teachers are in

¹ As I was writing this section a girl of at least average intelligence was reading *The Testament of Youth*. She was horrified that it was as difficult to get into Somerville in 1913 as now. 'Why, that's no change in a *lifetime*,' she said, meaning of course her own lifetime.

practice somewhere between these two schools—occasionally using formal methods and very often letting sense training look after itself. The dangers of formal training lie in the facts that there is no psychological proof of the transference of training, that in life we have to use one sense to help another, and to train ourselves to interpret life through using our sense apparatus as a whole, as it were. The danger of informal sense training is that it is often neglected. Sense experience is vital and at all costs should play a large part in the formative years of childhood.

CHAPTER IV

NATIVE INTELLIGENCE

MEANING OF INTELLIGENCE

INTELLIGENCE has been variously defined by many psychologists and by most considered as a distinct native endowment. But McDougall, in *The Energies of Men*, points out that since in men, as in animals, those seem to be most intelligent who are endowed with the most varied native abilities, intelligence should not be looked on as a new factor independent of sense endowment and native propensities, but as the working of the more varied and richer endowments. 'The richer and more varied the native abilities through which the native propensities express themselves, the more readily does the creature extend the range and variety of those abilities, *building up in his instinctive strivings abilities that are virtually novel.*' The italics are mine, because it seems to me that in this statement lies the key to the situation for the teacher. It may or not be correct to call intelligence a native endowment independent of other native propensities, but it is correct to say that whatever its origin it does modify enormously the experience acquired through the senses and the working of native propensities of all types. Hence the value of such a description of intelligence as 'the capacity to make use of capacity' or 'the capacity to use experience'.

It is, however, noticeable that the well-endowed child often seems the most intelligent and, perhaps even more often, that a child who shows he has high intelligence by the result of standardized tests, does badly because of

poor eyes or ears or lack of some such driving force as curiosity or love of construction. It is in cases like these that one is led to think that native intelligence, or the capacity to make a little experience go a long way, is not a function of other endowments. Nor, indeed, in considering what factors go to the type of successful achievement expected from intelligent people should the indomitable spirit of man be neglected, not necessarily a possession of intelligent people only.

MEASUREMENT OF INTELLIGENCE

The range between the feeble-minded and the child of super-normal ability is very wide and suggests at once the problem of measuring intelligence, or finding standards by which to judge in what section of the scale a pupil is to be placed.

In England, a child is said to be feeble-minded if there exists from birth, or an early age, mental defectiveness so pronounced that he appears to be permanently incapable of receiving proper benefit from the instruction in ordinary schools. It is important that teachers should note the word permanently, for illness, bad home conditions, constant change of schools, unsuitable methods of teaching and many other causes can temporarily affect a child's capacity to learn. Such children are generally said by teachers to be backward, and must be distinguished from the child who is dull though not feeble-minded. Here then we have already four grades in the scale of intelligence—the moron, the dull child, the child of average ability, and the gifted or super-normal child.

Ever since Binet and Simon set out to investigate whether the backwardness of a child was due to mental defect or some such bad condition as illness, a small army of psychologists have been devising tests by which to grade a child's native ability.

Such tests are commonly called 'intelligence tests' and

are the antithesis of 'scholastic tests' which are used to find out the use a child has made of instruction. The intelligence tests are based on the assumption that, with no schooling whatsoever, a child will learn a great deal and that it can be ascertained what the normal child of one to ten should know, how he should reason and what he should be able to do.

If the reader will consult the report issued by the Board of Education on Psychological Tests for Educable Capacity¹ or L. M. Terman's *Book on the Measurement of Intelligence*,² he will find the standardized tests for children from three to fourteen, for it is now well established that intelligence, like height and weight, grows steadily during the age from birth to thirteen. Somewhere about thirteen a child's intelligence stops growing, and though it is to be hoped that he will add to his knowledge, skill and appreciation all his life, his actual ability reaches its maximum growth in his early teens.

If his actual ability is that of the normal child at ten years of age his 'mental age' will be ten, at thirteen it will be thirteen, and at three it would have been three. Thus it appears that at a very early age it is possible to estimate a child's ability, and the experienced woman knows that the child who cuts teeth at the usual age, learns to walk and talk early, is most likely more intelligent than the child who is backward in any of these respects.

To make an estimate of a child's intelligence is, then, in these days of standardized tests easy; with patience and careful practice in marking, a teacher can acquire the skill. For such testing the teacher must find a child's mental ratio (commonly called his intelligent quotient or I.Q.).

By tests the child's mental age is found and to find the I.Q. the formula:

$$\frac{\text{MENTAL AGE}}{\text{CHRONOLOGICAL AGE}} \times 100 \text{ is used.}$$

¹ H.M. Stationery Office.

² Harrap & Co.

This ratio is approximately constant so that the child of three who answers the tests for the child of four can be said to have an I.Q. of $\frac{4}{3} \times 100$ or 133

while a child of four who can only answer the tests standardized for the child of three has an

$$\text{I.Q. of } \frac{3}{4} \times 100 \text{ or } 75.$$

The following statement illustrates what must be happening constantly in a large class: The child of three with an I.Q. of 133 may be working with the child of four with an I.Q. of 75 and other children of his own age with I.Q. from 98-100. In all probability their sense equipment and the strength of their native propensities also vary, and yet they may be expected to be interested in the same things and learn at the same rate.

The same variations would probably be found in any unclassified group of children, though the existence of B classes or 'special classes' might make the divergence less in the upper school.

Both to test individual children and to score the results need training and practice and it may be a long time before the teacher of large classes has either the time or the equipment for such work, but there are now many sets of standardized Group Tests—Dr. Ballard's, the Northumberland Tests, &c.—and it is to be hoped that soon it will become part of the normal procedure for a teacher, on taking over a new class, to use such a set of tests. The group tests are easier to give, no more difficult to mark and take far less time. As a rule it would suffice to begin with a group test and to give the children who score very low or very high individual tests.

In a later chapter the question of what we mean by an educated child must be discussed and in that connexion the findings of educational statisticians that have enabled

them to standardize achievement in certain school subjects can be used,¹ but for the present we can ignore achievement and consider native intelligence only in the light of the work of psychologists.

CLASSIFICATION OF CHILDREN

Undoubtedly the application of standardized tests has enabled educators to grade children with far greater objective certainty, and as all children do undoubtedly profit by the type of instruction suited to their intelligence and special abilities, the work of psychologists is here of very great value.

There is still a great deal to be done both by psychologists and teachers on the best methods of education for the average child, i.e. the child whose mental age roughly approximates to his chronological age. Probably if we want to make the very best use of a child's time in school, all classes must be intellectually more nearly homogeneous than at present and cross-classification must allow for the child of specific ability or backwardness to work in a suitable class. But it seems to me in every school arrangements should be made for the following types of child, discovered by the application of individual intelligence tests :

The Backward Child

Children with a mental ratio above 70 per cent but below 85 per cent are termed dull and backward and should undoubtedly be taught in special classes. But two safeguards must be taken to ensure that the child is not misjudged.

As a rule, an error of five points more or less to a child's score is not serious in testing ; the tester is liable to make slips and the child may not be at his best ; but if the five

¹ See Ch. XV.

points will settle a child's education for some years, it is important that every care should be taken. The child must be examined by a trained psychologist and a very full case paper should be compiled, in order to find out if the child is innately dull or is backward because of some extraneous cause and, consequently, perhaps curable. Thus not lack of innate intelligence but extraneous causes—irregular schooling, specific defects of sense equipment, temperament or character—account for about 10% of children who are below their correct mental age and who would, without further investigation, be classified as dull. In reality they are only backward.

It may still be best to transfer the child to a special class of backward children, but his treatment must be in many ways different from that of the innately dull. In the first place, of course, every effort must be made to remove the cause of his dullness, and psychologists and social workers, including teachers, should co-operate to improve home conditions, feeding, poor attendance, or whatever the case may be.

Secondly, though all children should learn at their own rate and through their own interests, it is even more important that the interests of this type of child should be used to aid his progress. The innately dull child will need special treatment throughout his school days, and perhaps all his life, but this temporarily dull child should work again with average children as soon as possible.

It is impossible to discuss the treatment of such children fully in a book of this size, but the following examples will suggest to the reader how multifarious are the causes of dullness, how varied the treatment.

The nervous child might on all achievement tests be classed amongst backward children. But worry would tire him and fear of doing wrong would make him refrain from asking for help or taking his share in oral work. In many such cases a sympathetic psychologist would find that he was average by the rating of his I.Q.

Such a child might do quite well with a sympathetic teacher of a backward class where he could get encouragement and success.

The lethargic child, on the other hand, will need more than anything work that interests him and the teacher who can help him will be he who can use the child's interests and build up standards of work.

Finally, the over-emotional or unstable child is often apparently dull, because this type tends to be careless and inattentive. Here again the cause must, if possible, be found for his emotionalism, and every effort should be made to ensure that he lives a quiet life and gets his full share of sleep. Such children generally are kept occupied by various forms of activity and the approach to school subjects is most successfully made when the child feels the need of them. This need to see the reason for learning is characteristic of all children but doubly true of those who are backward. Hence one constantly hears a teacher comment on the fact that though all her class do better and learn more quickly when they are working out some project or self-imposed activity, it is nevertheless the dull who progress most markedly.

Again, the optimum number for a class of dull children is much lower than that for average children. The teacher must possess exceptional patience and sympathy and, contrary to the assumption that one can set a fool to teach a fool, be very intelligent. The special aptitude of each child should be used and subject-matter and method should be suitable. Encouragement must be the spur to better work and above all the child should be helped to acquire confidence, for to think one is a dunce is often the way to become one.

Finally, all children in primary schools need far more practical and manual work ; but for the dull child learning can only come this way.

The Superior Child

Such children are obviously above the average and their I.Q. would vary from about 115 to 140.

In a large school of unselected children about sixteen might be in this class, but of these over three-quarters would have I.Q. from 110-119 and the other quarter I.Q. from 120-129. It is probable that no one in any school would register a higher I.Q., for, roughly speaking, only 1 per cent of the school population has I.Q. of over 129. Such children are called 'very superior' by American psychologists, and when a child has an I.Q. of 140 or over some people would label him as a potential genius.¹

The better such children are educated, the farther they will go, and one of the facts that must be faced is that education at its best, so far from turning out all children of one type, 'scatters' them into far more classes. Indeed, if it is found that a school or a class is producing children of fairly level attainments, the probability is that the teaching is stereotyped and dull, and the good, and even fairly good, scholars are wasting their time. As much harm can be done by working at too slow a rate and by acquiring success too easily, as by being driven to reach too high a standard. Hence the class for children of special ability, or the school in a large district, is as important if not more important from the point of view of the state, as that for backward children.

Dr. Hollingsworth, in her book on *Gifted Children*, cites case after case of the child of high capacity wasting his time, doing poor work and causing trouble by defiance or various forms of naughtiness, who has shot ahead and done excellent work as soon as he was removed to a class where the children were his equals in ability.

A case came under my notice a few weeks ago of John, aged seven, whose I.Q. is 130 and yet was getting damning

¹ Woodworth's *Psychology*, pp. 137-8.

reports from his school. His teacher complained that he never listened and yet had an 'uncanny way' of knowing more than the other children; the children teased him unmercifully because of his pedantic speech and mature interests. Matters came to a head when the boy, at last resenting a new boy teasing him, abused him in violent language and spat at the teacher who came to stop the scene. Expulsion followed, but the mother was persuaded that part of the difficulty at least was John's utter boredom about his work and his inability to enjoy the games of less intelligent children. Fortunately, there is a school to which he can go where there are some exceptionally able children, where individual work is encouraged and where special interests are assumed and approved. John has now been at that school three months, is very happy and occupied and more friendly and easy at home as a result.

SPECIAL APTITUDES

Just as psychologists have demonstrated, and teachers have assumed, that people are endowed with more or less intelligence which can neither be increased nor reduced by education, so do they maintain that we are endowed with various aptitudes—'the essential characteristic of which is that it exists prior to training or education in the special field of activity to which it applies, and is not dependent on such training.'¹ The factor common to all types of mental activity, symbolized by psychologists as 'g', can be measured by tests now standardized and used to determine the I.Q. described in the previous section.

Spearman has demonstrated that all types of mental activity have, in addition to 'g', certain group factors as, for example, verbal, number, memory, speed, reasoning, etc.

Finally, it seems to be proved by statistical analysis

¹ Freeman, *Mental Tests*.

that there must be specific factors, functioning in one type of activity and symbolized by 'S'.

Outside psychological laboratories there is great confusion of thought on the subject of these special factors or abilities, and some teachers, finding a pupil brilliant at one subject, poor at others, at once predicate a special ability though psychologists have not as yet substantiated it.

There certainly seems to be evidence of special aptitude for music and mathematics, though both may depend as much on 'g' or one or more of the factor groups as on any yet undiscovered aptitude. The only aptitude about which most psychologists seem sure is practical aptitude, for which many tests have been devised.

Until teachers have been trained in psychological testing or can get more help from psychologists, it seems wise for them to refrain from acting on the assumption that these special aptitudes exist, and by their presence, or absence, explain outstanding cases of success or failure in a given subject.

It is safer to look for the causes of good or bad performance in the personality and experience of the pupil. A boy may be brilliant in mathematics because he has great intelligence, has had good teaching and comes from a home in which it is assumed that all people worth their salt shine at mathematics.

He may or may not have such marked ability that he will make a career for himself as a mathematician ; indeed, if interest lasting into maturity and successful performance throughout life are tests of special ability in any subject, then very few of the people who do brilliantly in their university have any special endowment.

Again, parents, teachers and even the child himself are apt to explain poor performance in other subjects on the ground that the pupil is specially gifted in music or art—as if high ability in one subject precluded success in others. The wisest practice seems to be based on the fact

that 'g' is a common factor in all mental activity, and as a man cannot be a great artist or musician without high intelligence, he should be able, as a schoolboy, to do at least averagely well in school subjects. If he does not do so, the blame lies with parents who have been indifferent to education, or with the teachers who have not sufficient skill in their own art to enlist this exceptional boy's interest.

Most educators, including teachers of art and music, urge a good all-round training and deprecate early specialization; but the teacher is then bound to find ways of interesting the exceptional child, for he gains nothing by loafing his days away in compulsory attendance at classes where he does as little as possible.

What is true about special ability, if it exists, is equally true about special disability, that some folk proudly claim. If a child is of average intelligence he can do average work in most school subjects, granted that he wishes to do so and is free from emotional inhibitions. For example, if a boy does badly at mathematics and makes an average score in intelligence tests, the first thing to do is to find out why the work is bad.

He may be uninterested, frightened of making mistakes, willing to have the additional attention his disability brings him, or, most common cause of all, badly taught either in the past, present or both. In any case the appropriate remedy must be applied; success must take the place of failure and the boy must be weaned from the idea that he cannot do mathematics and that there is something distinguished in his disability.

It might be argued that life being so short, art so long, time given by a budding musician or artist to general education is lost. Against this view we have to place the fact that interpretation of experience and creative activity, in whatever medium of expression, depend to a great extent on the artist's experience. Real education should add both to experience and the power to interpret it.

The great teachers of art and music, like those of science, often complain bitterly of the lack of education of the people who come to their schools and colleges.

To complete the picture one should make a similar claim for systematic teaching of art and music to those brilliant pupils who specialize far too early on those subjects in which their teachers and parents hope they will distinguish themselves in scholarship examinations and, later, at the university. Such children suffer because their elders tend to rate success in examinations too highly, education too lowly.

The influence of school and family over these highly intelligent and, in some cases, highly sensitive children can hardly be overestimated. Most children of exceptional intelligence will become linguists, mathematicians, painters or musicians, not because their intelligence functioned along one line only, but because they were subjected to certain influences during the most impressionable years of their life. Sometimes they follow in the footsteps of the family or a loved teacher; sometimes they start out on a new field of exploration for themselves, also probably because of an early experience which made them turn away from their father's profession. Had, in short, J. S. Bach been the son of a great physicist and gone to a school whose chief god was mathematics, we might have lost one of our greatest musicians and gained a great scientist.

In certain schools there is a tendency to exploit a child with exceptional talent, especially if it is for music or acting. Such a practice is wrong, for it causes a child to rely unduly on the approval of others when he must in the long run acquire his own standards of conduct; in many cases it also leads to his overestimating his gifts. Undue praise may do nearly as much harm as undue blame, for it gives wrong standards of personal worth and achievement. A school must be run on the assumption that it takes children of all types, of all grades of intelligence and

kinds of special ability to make a good community, and that every one must play his part.

SUMMARY OF CONCLUSIONS

It seems as if any teacher seriously considering what use he must make of the work of psychologists on native intelligence, would have to organize his work to allow for the following facts:

(1) The different degrees of intelligence to be found in an average class. Different standards of achievement and different rates of progress must be expected.

(2) For the backward, whether innately so or temporarily, special arrangements must be made, either in small classes or by individual help. They need above all to be successful and to receive kindly sympathy and help.

(3) Unless the child of special ability is head and shoulders above the average, the more he can be interested in other subjects than his own, the more he can be trained to take it for granted that though he is good in one way others are good in others, the better for him and his world. He should not be exploited but neither should he be snubbed.

(4) As a child's I.Q. is fairly constant and the child of three rated at 90 will probably be a 90 when thirteen, 'growth' of intelligence only means that with native ability a child will at one age know and do certain things, at another, others. The capacity to use capacity, or to make use of experience, will be roughly the same.

Hence the teacher must do his best in the junior school to make such an environment as will be suitable for the below normal, the normal and the super-normal.

CHAPTER V

EXPERIENCES IN EARLY CHILDHOOD

METHODS OF INVESTIGATION

EXPERIENCE so quickly modifies the newly born baby's outlook on life, and for all young, and most mature people, the present so forcibly drives out conscious thought of the past, that it is beyond the wit of man to be dogmatic about early experience. But during this century various schools of psychologists have developed methods by which, through the interpretation of a person's behaviour in the widest sense, they establish a reliable hypothesis as to the first reactions to his world. The scientists who have evolved the methods—known as those of psycho-analysis—have all had medical training and special knowledge of nervous diseases.

Just as attempts to measure intelligence arose from the need to deal adequately with backward children, so the attempts to get at the origins of a man's outlook on the world arose from the need to cure people suffering from mental diseases—shell shock, claustrophobia, abnormal anxiety, &c. Once such outstanding men as Freud, Adler, Rivers, had discovered how to 'analyse' a mind, others often shamelessly under-equipped, misused the methods and consequently brought psycho-analysis into disrepute. But we do not refuse to use the discoveries of doctors because there are quacks amongst them, and educators certainly should not ignore the work of psycho-analysts because some unqualified practitioners do harm by misunderstanding it. Nor should the fact that psycho-analysis brings to light facts about the working of our minds that

seem to many unsavoury, blind us to their value. To this day many people dislike the idea of man's kinship with more humble creatures and the same type of person seems to resent the idea that a child has interests and drives to action that are more animal in their nature than spiritual.

The methods used by skilled analysts are intended to discover unconscious and entirely forgotten experiences that affect our present attitude towards life and consequent reactions. Once the assumption has been accepted that past experience modifies a man's outlook on life enormously, the problem of the unconscious becomes of great importance to psychologists. Even the least expert observer can occasionally see a friend influenced unconsciously by a past experience and we all know of cases when we are consciously influenced by it—the most obvious being when we say 'Never again!'

Carrying observation a step further, it was possible to make and substantiate the hypothesis that experience might be thought of, to use James's metaphor, as a series of conscious fields; that to which we are directly attending is in the focus, but outside the focus is a field of experience which we can easily bring into our consciousness. Thus I am attending at this moment to the problem of consciousness but should a telephone call come I could, with some impatience but with ease, 'switch' the light of my mind on to another field of consciousness. In the same way I can, with more difficulty, bring some small part of my past experience into the light of the present. That past experience which I can call up by using as bait ideas in present consciousness is said to be in the field of the subconscious. Thus, if I cannot immediately recall when I saw X last but eventually can with certainty make the statement that it must have been last Thursday because I remember it was the day I did so and so, I am using facts to call facts to mind which I have temporarily forgotten.

The field of temporarily forgotten experiences that can

be recalled is large, though but a small proportion of the experience we have had in our lifetime, and by far the greater number of experiences thus held in subconsciousness, are of recent occurrence. Most of our experiences we have apparently entirely forgotten.

Here the psycho-analysts come to our aid and on the results of countless investigations into the past history of people suffering from mental disorders, difficult children and those with so-called criminal tendencies, they are able to throw light on why some very vivid experiences are apparently forgotten and on the value of recalling them. Indeed, they re-orient our attitude towards experience and show us that it is not the process of remembering that needs explanation but that of forgetting.

Many of these experiences occur in early childhood before education has taught a child to face disagreeable facts. Thus if a child who is interested in his sexual organs is punished for it or if he has some terrifying experience—as finding himself alone in a dark place—he naturally tends to turn his thoughts away from events that have caused great distress or fear. But both these experiences are connected with very strong innate spurs to action—sex and fear—and energy is not easily drained off from such deep channels. Hence when the child is off his guard—perhaps when dreaming—the experience in some confused form unrecognizable to himself rises into consciousness and nightmare or night terrors may result. In time of stress, it seems, these suppressed and forgotten experiences take their revenge and many a man in war-time became a daily victim to some fear experienced in early youth and long forgotten. Thus Rivers cured men of claustrophobia by patiently disentangling dreams, by pushing back and back the method of association by which we recall a forgotten event, until he brought in to his patients' consciousness the original cause of fear—in one case being shut up in a cupboard.

When one realizes that the experiences of early childhood may affect a man's complete life the need for the education of parents and teachers of young children is apparent.

If, indeed, teachers only learnt from psychologists that children tend to forget what is associated with unpleasantness, to remember the pleasant experiences of life, their debt to psycho-analysts would be great.

There are many schools of psycho-analysts and the layman cannot presume to decide between them. For some time Freud and his school of workers dominated the intelligent mother's attitude towards her children. That children show early interest in the processes of birth, that they are often conscious of the sexual life of their parents, are not facts to be shocked at but to be dealt with intelligently. The cumulative evidence that lasting harm may be done to children treated unsympathetically at such times—punished when they should be helped to understand, made to brood over the problems secretly when they should have their attention distracted by gay and happy occupations—makes the training of the pre-school child more important by far than that of the undergraduate.

A CHILD'S FIRST INTERPRETATIONS

It will be noticed that all the experiences used to illustrate this account of the work of psychologists have been emotional in content, e.g. early sexual emotion and fear. Such emotions connected with innate propensities are the spurs to action in the days when a child has not learnt to reason, to respect other people's standards or, in other words, gained those controls of conduct which his educators desire for him. This tendency to interpret the world around us in terms of our emotional bias is by no means confined to children, and the reader will be a better thinker and a more honest man if he will question his own supposed motives in order to assure himself that fear, pride or self-

assertion is not at the root of much conduct that he calls disinterested. But with little children nearly all conduct is aimed at satisfying some emotional need—a feeling of hunger or cold, a feeling of pleasure at using one of his senses, kicking, tearing paper, banging one brick on another, making unintelligible sounds, &c. Now a child learns in such ways the geography of his body, the difference between biting his own toes, pulling his own hair and biting and pulling at some foreign body; he learns how to seize a desired ball—think what this means in co-ordination of sight-and-arm movements, &c., &c. It is, indeed, because every child teaches himself so much that his intelligence can be tested as early as three—and indeed earlier.

Much that he learns, his skills, his likes and dislikes, can be observed by the intelligent onlooker, and yearly more data are collected of what a child of various ages likes, dislikes, can do, say, &c. What effect all these experiences have on the child's attitude to life is more difficult to estimate, and here again we owe much of our most valuable knowledge to the psycho-analysts.

Every psychologist stresses the importance of temperament and innate tendencies in a child's interpretation of his universe and his consequent reactions. Freud and his followers consider the early manifestations of the sexual desire the determining factor, Adler and his school give the sense of inferiority the pride of place with the accompanying attempt to overcome it. Here in brief form is Adler's theory of the nature of a child's interpretation:

(1) A child from his birth is engaged in a struggle to develop in accordance with an unconsciously formed but ever-present goal—his vision of greatness, superiority or perfection. The struggle, Adler maintains, dominates his thinking, imagining and action.

(2) Now given a child has a feeling of helplessness, littleness, inferiority—what you will—and wishes to free himself from it, he can only use the material with which he is

endowed and the instruments he possesses—the experience gained through his senses, his instinctive actions, and his powers of expressing himself.

(3) Further, he begins his interpretation and accordingly weaves his pattern of life, long before he can be conscious of his aim or aware of the strength or weakness of his equipment. Personality is thus fashioned on the emotional and personal view that the child takes of the facts of life and may be entirely or partially mistaken.

(4) Hence the first thing an educator must do who is dealing with a child who seems in any way unhappy or unsocial is to try and find out if he has a view of life that is mistaken.

(5) According to Adler, all children have a feeling of inferiority which stimulates them to better their situation; this reaction from a weakness is known as a psychological compensation. Such 'compensatory traits' can often be observed, as for example in children of marked physical defect, in neglected children, children who feel unloved, or children who are pampered and so fail to develop the power of dealing with the daily situations that others cope with easily.

The sense of inferiority spurs the child to strive for superiority. Adler declares that in his clinic, where excellent work is done with maladjusted children, it is difficult for the workers to say which seems more harmful—the exaggerated feeling of inferiority or the undue striving for superiority.

Obviously a sense of inferiority makes an individual supersensitive and he makes his own psychological peace—often divorced from reality. Thus a child who can't play a game will say he does not like it; who can't do a subject will say he is not interested in it.

(6) Consequently it is only the normal child with no undue sense of inferiority who will take school work easily and be a contented member of his group, striving for success

but willing to take defeat cheerfully. The teacher should try to find out what attitude the child has towards life or what pattern he has woven for himself of the materials to hand, if he is unhappy or not doing as well as his intelligence quotient suggests he should.

If such a child assumes indifference, or gets pleasure out of being naughty, if he excuses himself on the score of health—he may really make himself feel ill—these attitudes should be looked on as signs that he is making wrong assumptions of what is desirable in life.

(7) And this brings us to the crucial fact for educators that every act of a child expresses his whole personality and is unintelligible without knowledge of the background. Adler insists on this 'unity of personality', and his theory has obvious bearing on the question of rewards and punishments. It is clear that in many cases a seemingly good or bad deed is better left unnoticed, for a child who strives unduly after praise puts himself under too great a strain, and the maladjusted child who is naughty because he desires to attract attention gains his end by punishment—especially if it be given in front of his class mates.

RESULTS OF EARLY MISCONCEPTIONS

Teachers and parents must try to find out why a child is naughty, sulky, lazy, &c., try to help him to a new sense of values and encourage him to modify his conduct.

Adler's case papers of maladjusted children should be studied by all teachers, for they are full of suggestions as to the reasons for the usual type of difficulties we encounter in school. But here are some cases of normal children who have misinterpreted life and consequently behaved 'badly'.

A child who had been the youngest for some years suddenly found his place taken by a new baby. His parents had done all they could to interest him in the new child and to show him all possible love and attention. But

the fact was that they had pampered the child for the first three years of his life : he had not been left to amuse himself, he had never been left alone, his illnesses were taken too seriously, his pleasures and even his naughtiness made too important. He had, in fact, grown used to getting all the attention he desired and now that his mother's time had to be shared with another he became naughty, quarrelsome, rude to his mother and at last ill.

The re-education of this child was a long matter, but a teacher who distracted his interests from his parents and taught him to amuse himself was largely responsible for his cure.

Another child, left motherless at ten, became a little mother to two younger children and was often told that she was her father's right hand. Clearly it was best for the family when a capable aunt came to live with them who took the burdens off A's shoulders. But A, never very bright or interested at school, missed the feeling of importance, and though both her father and her aunt went out of their way to try to make her feel how helpful she was to them, she could brook no authority. She grew defiant at home, encouraged the children to be naughty, and made life almost impossible for her aunt.

Here again a teacher helped to solve the difficulty by giving A extra help in order that she might do better at school and asking from her help with many duties—milk for the younger children, &c. But this case is cited because it is an example of a child whose social development was seriously hindered by too much being asked of her and being made too important. One constantly sees the bright child, or the capable helper, being unduly used and unduly praised. Such children are often very unhappy when they go into another class where their help is not needed and where they feel the lack of praise. It is common for them to satisfy their desire for importance by defying the teacher.

It may seem that if a teacher has to consider the danger

of neglect and balance it against the danger of over-consideration, the difficulties that are experienced by unloved children and balance them against the difficulties of the pampered children, he will fear to do anything but teach the class as a class and ignore individual differences, hoping thus at least to do no harm. He will do more harm than he wots probably, for each child in his class needs some special help to straighten out his misconceptions of the world he must live in, and one can no more doctor minds than bodies in classes. There must in every school be class work, class play, class give and take. But there must be time for individual work, talk and play. Adler, complaining bitterly about pampered children, urges us to treat children as we treat our equals in age, neither with superiority nor with undue consideration. Such treatment is due to all children, normal and difficult alike. They will to a great extent give us what we ask of them, and perhaps the most important function of a teacher is to help his pupils to understand what is needed of the good child in the type of community that aims at least at consideration for all men and love for one's friends.

ADLER'S SUMMARY

No better summary of this difficult question of a child's attitude towards his environment can be made than a couple of pages from Adler's chapter on 'The Unity of Personality' in his book on *The Education of Children*.

When we recognize the true state of affairs we must admit that it is of no use to pick one fault or another and punish the child for it. Suppose, for example, that he forgets a book—it would be a wonder if he didn't, for when he forgets it he gives his mother something to do. It is not an isolated individual act, it is part of the whole scheme of personality. When we bear in mind that all the expressions of a personality are consistent parts of a whole, we can see that this boy is acting simply in accordance with his style of life. And the fact that he acts consistently, in accordance

with the logic of his personality, at the same time disproves any presumption that his inability to perform his school tasks is due to feeble-mindedness. A feeble-minded person is unable to follow out his own style of life.

This highly complex case brings up still another point. We are all of us in a somewhat similar situation to that of this boy. Our own schemes, our own interpretations of life, are never in complete harmony with the received social traditions. In the old days one looked upon the social traditions as sacrosanct; now we have come to realize, however, that there is nothing sacred or fixed about the social institutions of humanity. They are all in progress of development, and the motive power in that process is the struggle of the individuals within society. Social institutions exist for the sake of the individual, and not the individual for the sake of social institutions. The salvation of the individual lies indeed in being social-minded, but social-mindedness does not imply forcing the individual into a Procrustean social mould.

Such considerations on the relation of the individual to society, which lie at the basis of the doctrines of Individual Psychology, apply with special force to the school system and its treatment of maladjusted children. The school must learn to regard the child as a personality, as a value to be cultivated and developed, and at the same time it must learn to use psychological insight in judging particular acts. It must regard these particular acts, as we have said, not as single notes but in the context of the whole melody—the unity of personality.

CHAPTER VI

SPECIFIC AND GENERAL HABITS

THE LEARNING PROCESS

IF, as was suggested in the last chapter, a child from his earliest days makes his own pattern of the world he lives in, his parents and his surroundings take a great part in supplying the material and influencing the design, sometimes consciously, sometimes unconsciously. The child brought up in a crowded city where policemen see to his comings and goings from school to home, where shopkeepers supply his needs of food, clothing and sweets, where the streets are his habitation and the lights of the buses and cars his shooting stars, must carry with him all his life a different background from that of the village child who possibly connects the policeman with poaching, depends far more on home and the allotment for food, has his first games in a neighbouring field, perhaps round a special tree or by a special pond, connects one village shop with all his shopping, and only knows of traffic as the cars that make one or two roads no good for games. That motor-buses and the gradual spread of building are making the country more like the town will necessarily make the countryman more like the townsman.

Wordsworth wished for Ruth, the 'beauty born of murmuring sound' because he knew it is by such experiences that a child grows to feel at home in the world of nature, as it is from the daily happenings in town that the Cockney gets his 'feel' for London. Each to his taste, but no one can entirely escape from the experiences that his human and social environment impose on him, though

most children seem to have a happy power of turning their minds from much with which we wish to impress them but of which they fail to see the use.

In the widest sense of the word education modifies a child's own view of his world, and Bagley maintains that its function is to impose on him definite controls of conduct ; as for example, habits, ideas and ideals, tastes, &c. Certainly education does modify his conduct, but it must be remembered that in one sense it is only self-education that can do so. From the beginning, a child's intelligence alters instinctive conduct—he cries because he desires something, finds he does not achieve it that way and learns to ask cheerfully. Yet even here there is another factor, for if he is given what he wants when he cries, cry he will. Hence it could be fairly stated that his educator, in this case his mother or nurse, has taught him to modify his behaviour. The attitude towards education—that it helps the developing individual to modify his behaviour in the light of the best experience of his elders and his own generation is one of the most fruitful for teachers, as it constantly reminds us how much the educand must do for himself. 'The teacher's snare' is to assume too great a share in the process, and no child suffers more than the restricted, ordered, disciplined child, who gets little chance of self-education compared with the child who can gain security and happiness by his successes and learn wisdom by his mistakes.

Undoubtedly the whole of life might be called a learning process, and our problem as educators would be to find the types and methods of learning that would aid a man to become such a world citizen as we in our age and our community think best.

In a more restricted technical sense the learning process is the substance of subsequent chapters, but it is hoped that by the more general account of education given in this chapter many difficulties may be cleared away.

If the reader considered carefully any side of his development, the growth of a sentiment, the acquisition of some skill, he would find the same general principles at work as are dealt with in this chapter. Habits and general attitudes resulting from them have only been taken here because most of us have thought about habits, and an analysis of the process by which we acquire them is consequently an easier approach to new ground.

THE MAKING OF HABITS

It will be wise for the reader to clear his mind as far as possible of preconceived ideas on methods of making habits and evaluating them, and to consider carefully his own habits and those of his friends. Let us for a moment assume the correctness of the common meaning of the term habit—‘a settled tendency or practice’—and consider on what most intelligent men would agree.

(1) For each of us some habits have been far easier to acquire than others and some have never been acquired.

(2) If pressed further most people would say that they acquired many of their habits unconsciously—habits of speech, reading and writing, walking, eating, sitting down, and hosts of others.

(3) Try to get them to say how they acquired a habit at which they aimed and they will tell you by practice; one man practised a stroke in tennis before breakfast, another taught himself to sound the French ‘r’ by rehearsing at any spare moment of his busy day.

(4) The man is seldom met who says he has acquired perfection—we nearly all say that if and when we have more time or more energy, we will improve our form in tennis or our accent in French or whatever it may be.

(5) It is more difficult to get a man to discuss his bad habits, partly because he is often unconscious of them and may deny them; but if the reader can bring himself to

discuss them with some intimate friend, he will most likely get some such reason for them as that it is not worth while breaking them or that it is impossible to do so, or that as bad as, say, one's writing or spelling or accent is, it is the result of early training and cannot be altered now.

Psychologists can help us to get more light on the process of habit-making than can our friends, but on the whole the five points enumerated above keep us on the right lines and the help that we get from experts is in finding the reason for the ordinary man's view.

Thus, when we come to consider the capacity of any child to acquire habits—mechanical motor mechanisms that are accomplished unconsciously at a given stimulus—we find that a child's intelligence, innate tendencies, temperament and sense equipment are all controlling factors. A habit cannot be put on a child as a coat can, it can only be successfully acquired if it suits his personality. This seems a far cry from the usual rules which a young teacher acquires for the inculcation of habits, but it seems to me that until we realize the fact that our habits, or absence of habits, are conditioned by strong personal idiosyncrasies, an enormous amount of time and nervous energy will be wasted both by the teacher and pupil. Take for example one of the first habits a child has to acquire—clear speech. If he is shy and does not want to be heard he will have no inducement to speak out, and a teacher's insistence on his speaking until he can be heard may result in his casting out for the time his fear of loud speech by the greater fear of offending his teacher, but no permanent change will be effected.

That sense equipment may prevent clear speech is obvious. I have heard a child scolded for 'refusing' to make the 'th' sound who could not distinguish it from 'd'. The teacher was at fault here, for he had no knowledge of phonetics, so could neither help the child to hear nor to make the sound. Again, the question of pleasure-

pain control comes in ; if, for example, a child has been petted because of baby speech, it will take him longer to free himself from it than the child who has been helped to grow up. A friend of mine in her young and impressionable days had a teacher who could not say 'll' ; she imitated her and to this day fails to sound 'll'.

Secondly, it is undoubtedly true that most habits are acquired unconsciously though they are improved consciously. Such habits were first acquired in response to a definite need, and since the would-be possessor had all his attention fixed on the goal, he was hardly conscious of the intermediate steps. Thus a child finds that he must learn to write for some purpose of his own and he is so busy asking how you write 'o', &c., and watching it done in order to imitate, that he forgets how many times he tried before he finally could write the words he needed.

When, thirdly, having as it were acquired the rudiments of the skill for which the habit is needed, he sets out to improve his technique, his improvement will be in direct ratio with a complex made up of his desire and his native endowments. Thus a girl with a small hand will never stretch an octave as easily as one with long finger range, but she may play chords better because she hears the music she wants to produce while the other neither hears nor desires to make music. All the people who practise a stroke sedulously do not become expert players and one sometimes wonders what value the hours of practice have been. Without natural capacity for the required action, often very little. A corollary must be added here as to the assumption that if a habit must be acquired, say of spelling correctly, it can be acquired by insisting on repetition. Children have been made to write such a phrase as 'their book' dozens of times and when next it has to be written in a letter have spelt it wrongly. The only hope in this case is to be patient and find out why a child spells it wrongly and then get him to suggest ways by which he

can learn to spell it right. Teachers do not, I think, use sufficiently the help and co-operation that they could get from their pupils if they tackled them more psychologically. There is every reason why a teacher should try to explain to a child that a persistent mistake is the result of some maladjustment and get the child's help in putting the matter right.

Fourthly, why do we all fall so very far below what we could do if we would? Here perhaps educators are at fault and one of the best tests of good training is the standards of achievement the educand has. A good gardener is known by the way he finishes his job, and a good school should be able to inculcate in children a respect for good work.

Very often the size of the class or the need for a definite result by a fixed date is the cause of poor technique. A child is made to learn to write too early or too fast; or he has too much actual work to get through to enable him to take his time; no one explains to him why, having poor sight, he must look more carefully at the word or the map than his neighbour who has good sight. For some such reason he becomes mediocre, and as mediocre results are expected of him he is content with them. Here too comes in the question of ability and perhaps 'worth whileness'. There are certain habits every one must acquire, and the average child will reach the standard of perfection approved by the community. Thus probably the boys and girls of Sparta held themselves and walked better than our village children because it was the thing to do so.

Children from elementary schools often write far better than those from famous public schools, not because they are better endowed and have greater need of clear writing but because it is expected of them and they like to reach the standard of their community.

Finally, there is the psychology of bad habits, and here the value to us in a study of their origins lies in the help

thus afforded in our efforts to break them. If it is true that we cannot change any form of bad behaviour unless we know the cause and that the cause possibly is buried deep in our subconsciousness, it is equally true that we cannot break a bad habit as we can break off a faded flower from its stem. We must look for the cause and try to remove it. The most probable cause is either a low standard of behaviour or some misconception of desirable conduct or of desirable means to reach an end. To a great extent, then, the cause is some kind of mal-education.

Thus if a boy is slovenly in his work and careless in his speech, it is either because he has been allowed to assume that such behaviour is accepted—he may have lived in his early impressionable days with people with no pride of body or of work; or, he may be lethargic by temperament and have found that by being slack and doing poor work he escapes from demands on his energy or gets in an easy way the notice he desires—equally a case of mal-education. If such a lad's mother always sees that he is tidy, early for school, has his books, &c., he has acquired the slave that he desires.

If, to keep to simple habits, a child waves his arm each time a question is asked, whether he knows the answer or not, it does not necessarily imply that he is a cheat but that at some time or other he had the type of teacher who says: 'Come, come, hands up.' Again, the girl who makes up her face but is not too particular about other essentials to beauty, has a wrong idea of the means by which beauty can be achieved.

Hence in all cases to eliminate a bad habit re-education is necessary—new standards have to be acquired, new ideals to be realized and often a new technique for the realization of the ideals. And the older a child is, the more he is under the sway of habits, the more difficult re-education becomes. In this sense the adult who declares that he

would alter his accent if it were worth while means that the effort is too great, and he is probably correct.

One of the most important functions of a teacher is to give by every means in his power right standards, right ideals and satisfactory technique, for learning is easier while people are young.

GENERAL HABITS OR ATTITUDES OF MIND

It is important to distinguish between the simple motor-habits—cleaning teeth, buttoning clothes, reading, writing, walking, &c., and those generalized habits of feeling and thought that tend to incline a man to think and act in definite and predictable ways. Some of them, if not all, owe their origin to cumulative experience, and educators probably have that fact at the back of their minds when they refuse to allow breaches in certain types of action—neat writing,¹ immediate response to a bell, &c. But very seldom are the results justified, for more often the child writes neatly for one teacher, untidily for another, is immediately responsive to his father's call and indifferent to his mother's. Such facts cause many people to believe that general attitudes cannot be acquired in this way, and there is much evidence to prove that however carefully a habit is inculcated, there is no definite surety that it will function under different conditions. Indeed, a child can even eat cleanly at school and carelessly at home—though the same actions are needed in both cases—a fact which seems to contradict the assumption that if habit A is made up of the factors a, b, c, d, e and habit B of a, d, k, k, l, there will be a transference from A to B of the common factors a and d. Here in the case of the child's eating there are similar acts to be performed at school and at home, yet in one case he eats well, in another badly. So

¹ The teacher who demands from the eight-year-old an imaginary story to be written in his best writing is a case in point.

with speech, writing, sitting, &c., &c. The facts seem to point to the conclusion that habits acquired in one environment are only practised in another if one of these two conditions is fulfilled: either the habit is entirely unconscious and as much a part of the person's make-up as the shape of his head, or he has acquired a habit of which he sees the value, has striven to make it his own and is anxious to practise it on all occasions. Thus a girl wishing to speak well because she thinks it ladylike will speak well at home even though she is ridiculed.

Hence when we find that practice of an action does not result in one of these generalized habits that can be relied on to function under most normal circumstances, we must try to rouse the urge to acquire it by psychological means. The most natural way seems to be to live happily with a community that approves the general attitude and consequently to acquire it almost unconsciously. Man is a gregarious animal and he displays three marked characteristics of his species. He imitates consciously and unconsciously the actions and thoughts of those around him. Also he can, as it were, catch feelings from his fellows—if he is with people who fear the dark, he too will fear it. Thus we acquire many of our feelings which compel us to act in definite ways and which characterize our conduct.¹ But we not only get our emotional habits from our surroundings, we also get ideas. The process by which without rational ground we accept an idea as true is called suggestion, and it will be dealt with more fully in a later chapter.² Here it must suffice to point out that if suggestion is likely to work at all, it certainly will with children when the desire to feel, think and do as their teachers or older friends is very strong.

¹ The technical term for the capacity is 'sympathetic induction of emotion'. Animals have it too, and in early days it was of great value to men who must act immediately and on impulse if they were to preserve life. See McDougall's *Social Psychology*, p. 92.

² See Ch. X.

Probably long before it could be proved to even the most intelligent child that habits of neatness, accuracy, &c., &c., pay, he has gained the desire for them because of his environment. Hence the enormous value of bringing a child up in a world of happy belief in and practice of the social virtues.

Again and again as one considers the education of children, it becomes apparent that the best method is to put them in the right environment and give them every help and encouragement to educate themselves—their senses, their native intelligence, their natural endowments, their desire to have the love and approval of their elders and companions; the ease with which children will feel, think and act as their elders, will surely make the process easy.

As a summary to this chapter it may interest the reader to look at these facts from a new angle and to consider rules for the making and testing of good habits and the breaking of bad from the point of view of the school, and the application of these conditions to the formation of general habits or attitudes of mind.

SUGGESTIONS FOR HABIT-MAKING IN SCHOOL

(a) Whenever possible, wait for the habit to originate in a felt need and then, as better adaptations are needed, i.e. more accurate motor mechanisms, give the child every help in acquiring them.

(b) Get all the help you can from the child himself, remembering above all things that what brings him satisfaction he tends to repeat, what brings pain he tends to escape and forget. In this connexion remember his idea of causation is not necessarily yours: if he thinks you praised him because his answer was like that in the book, and if he loves or fears you, he will, even in undesirable ways, try to achieve right answers.

(c) Since the pleasurable is repeated and the painful re-

jected, it is obvious that social or 'good' conduct must be associated with pleasure and, conversely, undesirable conduct with discomfort.

(d) When the need for a habit is felt and greater perfection is necessary, practice is of great value. But the child must feel the need of it and the amount of practice that will be valuable to a child can only be known by study of his personality. It is not unusual for a teacher to depress a child so greatly by the amount of practice demanded that the child loses all desire to reach even an average standard, much less to excel. How much practice will result in improvement depends, then, on the personality of the child and the capacity of the teacher to give him higher standards of achievement. Such standards are generally acquired by suggestion.

(e) The breaking of a bad habit is a most difficult and lengthy matter and generally means re-education. Hence if the habit, though bad in the teacher's eyes, is trivial in comparison with what would be called a bad habit in an adult, it is better to overlook it. A case in point is writing—provided it is legible and swift it is a pity to worry a boy to alter his style or way of holding a pen. The use of dialect is another case in point.

(f) Since to acquire habits is not easy, for it necessitates acquiring a motor mechanism that enables the actor to respond unconsciously to a stimulus and carry out a complete act without attention, it is wise to be sure a habit is useful before striving to acquire it. The test seems to be that it works, i.e. does accomplish what is required, does save time and set the individual free for other activities; e.g. once a child can write unconsciously and easily he has, after speech, the most valuable and universal method of self-expression.

(g) General habits or attitudes of mind are acquired by suggestion from people one respects or, in the case of very intelligent people, by pondering on one's acts: thus an

intelligent boy, who has found it pays to collect all relevant data before trying to solve a mathematical problem, could easily generalize that it is a valuable practice in all cases ; a good teacher of mathematics should be alive to the wide applications of his subject.

Such attitudes of mind as love of truth, respect for good work, &c., are the stuff of which character is made, and the psychology underlying habit-making underlies also their acquisition—there must be desire to become truthful, there must be thought and intelligent consideration of what is implied by truthfulness ; these conditions being fulfilled, practice will make such perfection as is possible to any given individual.

In this sense it is life that educates, and the child from the earliest days takes or rejects what seems relevant to his immature self, acquires ways of action, sentiments that drive him to further effort or to despair ; the thoughts of his own community are accepted and many a child grows up to be as his fathers were.

But at this point technical educators, the teacher and, more and more, the Press and broadcasting take up the work and teach him, or try to teach him, not only to do as his fathers did but better ; to know more and think more, and act more consistently. In so far as education does make of each generation more humane men and better thinkers and workers, it has succeeded.

It is with this aim constantly in mind that the special work of the teacher in the school should be considered.

CHAPTER VII

CONSTRUCTIVE WORK AND IMAGINATION

THE FIRST USE OF IMAGINATION

IT is true that a child must work with the endowments present at birth in his first attempt to make a place for himself in life, but it must not be forgotten that intelligence is also an innate quality and probably from the earliest days is occupied in modifying the native reactions to life. This modifying and moulding capacity which we call intelligence is the essential condition for education; in apes or dogs and lowlier animals it makes the achievement of instinctive ends quicker, and the pursuit of those that are not purely instinctive possible. In mankind it is, with his growing sentiments, the most potent control of conduct and in a rudimentary form it is so with young children.

Most people would substitute memory as the earliest control of conduct, and when asked the meaning of the statement that even a baby learns by experience, they would say that he 'remembers' what happened and acts on his memory. But it is the future that is important to the young and active, and hence, though it is true that if a child had not memory he could not intelligently modify his conduct as a result of past experience, it seems reasonable first to consider the use a child makes of his intelligence in the shaping of his future conduct and to leave the nature and function of memory to be discussed later.

As soon as a child has any interest in the future the simple

manifestation of imagination is apparent, for he uses past experience to shape future conduct. At a very early age varying grades of intelligence show themselves: thus one child will put a footstool on the top of a chair and so reach his toy quite quickly, while another will fruitlessly try to reach it without further aid.

The first uses of imagination, or the power of using past experience to shape future conduct, will be seen in young children, in connexion with native propensities, or appetites: they soon learn, for example, from whom and in what way they can get gifts of various kinds; they soon learn with whom they must check anger and on whom they can wreak it.

Now it is not meant to assert that a child consciously thinks 'yesterday I was angry with X and was punished, but with Y I got my own way. To-day I want something X has, but it is no good being angry with him'. I doubt if any human being consistently thinks out his actions in that way, but that subtle modification of conduct almost unconsciously carried out, that makes it suitable for the new situation, should cause just as much admiration for the mind of man as a wonder-working machine.

Of all the native propensities that call for the use of intelligence none is so powerful as play. In play the child is trying out the life he sees and, indeed, feels around him, trying it out with what material he has to hand. He wants, for example, to feel he is a bus-driver and as no real bus is at his command he makes one of the material he can find. Because the child of three will be content with the sofa for his bus, and the child of five insists on making a bus with wheels and steering gear—if that is what has attracted his attention—some people say the older is less imaginative. Such a statement in the end leads to nonsense, for surely the scientist in his laboratory is at least as imaginative as he was when he played at laboratories because he had been to X's. The explanation of

the difference between the imagination of a child of three and that of a mature man must be looked for elsewhere and it is a workable theory that the difference lies in the 'images' on which imagination works.

THE IMPORTANCE OF IMAGERY

Students who have studied the rudiments of brain physiology are acquainted with the assumption that every experience to which a man is subjected leaves a trace in some brain cells. In the same way, if we think in terms of psychology instead of physiology and in terms of mind rather than brain, we find we have a very good working hypothesis that simplifies many of our problems if we assume that the result of any sensation we experience is some 'memory image'. These images vary greatly both in quality and intensity in various people. Thus, for example, two people hear the same bird sing at the same time, but one will record the experience by a picture of the bird solitary on the tall, slim larch-tree, the other will recall the song by the words 'tell him so, tell him so'.

As many sense organs as many experiences, as many experiences as many memory images: the look of the garden, the smell of the lavender, the call of the tit, the feel of the warm raspberries, the taste of them, the weight of the garden chair, and a host of others, many of which are obscure and not easily differentiated from the body of past experience. Many psychologists maintain we think only in images, i.e. the look or sound or 'feel'¹ of the word is essential to our thought, if no stronger image is apparent.

Indeed, as helpful a thinker as Stephen Ward maintains that one of the criticisms to be made against our times is that 'thinking is too much delegated to a small minority'

¹ i.e. The complex memory image of the many muscular contractions that are necessitated by saying the word.

because 'thinking is hard, hard in the same way as physical exercise is hard, for the progress of thought is, for us humans, indicated by the extent to which we succeed in rendering it in terms of mental imagery, the imagery being nothing but a form of muscular activity'.¹ Hence the justification for the time and pains a good teacher of English will spend on helping his pupils to a knowledge of the exact meaning of words and encouraging them in all their writing to re-translate their words into imagery. Housman could not have written

Loveliest of trees, the cherry now
Is hung with bloom along the bough,

without a vivid and accurate image of wild cherry-trees in spring; nor could, I think, teachers ask for children's eyes on them or on the board, if words called up images to them.

At any rate it is clear that if A has excellent sight which he has used to solve many of his problems, visual images will play a very important part both in his memory and in the use he makes of his past experience. So we get our visualists, with sight for best sense, and consequently visual images of the greatest use in imagination; audilists with excellent hearing and vast stores of auditory images that can be called on.

The value of the senses as a means to learning and the use of the best sense have already been discussed. Here two additional facts must be considered if we are to see what part they play in imagination.

It is not only those experiences which are the direct result of some stimulus to a sense organ that are remembered. Feelings of even a vague kind, like weariness; actions, such as climbing a hill, can also be recalled. It is probable that at the basis of the recall is some 'sense-image', but in actual introspection a more complex image

¹ *The Ways of Life*, p. 60.

is recalled—the feeling of dejection in the clumsy work one did, the impulse to cry.¹

Secondly, as more experiences crowd in on the growing child, his first rapturous and comparatively simple impressions give way to more complex and, as he observes more often and more clearly, his images alter accordingly. Thus on first noticing a bus the rapture of hearing the horn might be so great that nothing else was noticed and for the child the bus was the horn. When he plays at buses all he will desire is to make what he imagines to be the sound of the horn. Later he observes the man who uses the horn sits in a closed-in place and he will insist on sitting in a similar place. When he has played out to the full the idea of a bus he may lose interest in it altogether or he may carry on his discoveries—add a brake, wheels, seats for passengers, admit a friend to be conductor and even make a number plate.

As the same child learns to read and gains more freedom of action his experiences are proportionately more numerous and more varied, though not necessarily more vivid; so too, his plans will change and it may be that instead of desiring to make a bus it will be a book he wants to make or an examination he desires to pass. The process, however, is the same—he shapes his future conduct on his past experience and the stuff out of which he makes his vision is imagery in one of its many forms.

TYPES OF IMAGINATIVE BEHAVIOUR

There is a tendency to consider imagination as a gift with which certain outstanding people like artists, musicians, the type of scientist who is in the public eye, are endowed and to assume that the rest of us are ordinary,

¹ The ordinary reader should constantly test all psychological theories by introspection, and for the teacher this method is doubly important, for it helps him to understand children.

plain folk, with no imagination to speak of. But if the above account is correct, we are all imaginative to a certain extent, for to some slight degree we modify our plans for to-morrow's conduct in light of yesterday's experience, and thus at least create our daily life. But the difference between the amount of experience that A needs before he can modify his conduct in light of it and that which B needs: the difference in the originality of A's design in definite branches of work and that of B's, is as great as the difference between the work of the mentally deficient man and that of the man of highest ability. When we speak, then, of a highly imaginative person—always assuming that imagination shows itself in the field of a man's interest—we mean that he learns from very little experience; that what experience he has he can apply to the solution of widely different problems, and that with few or no false starts he will find a good solution because he has ability to foresee, visualize or image what will be the results of a given course of action.

Hence the task for the teacher is to consider the child as a self-directing person with definite endowments and interests and give him every opportunity of doing creative work of all types, but especially in connexion with his dominant interests.

Just as one can say many men many opinions, so one can say many men many temperaments, many temperaments many memories, many memories many imaginations. But there are well-marked mental states and on the whole people can be classified according to which mental state most closely influences their conduct. Thus we can easily distinguish the emotional person who feels rather than thinks what should be done and acts on feeling both from the intellectual man who thinks out his problems and acts on reasoned grounds—or at least more reasoned grounds than those of the emotional man—and, from the 'practical' man, as he is sometimes called. He alas!

often lacks insight into others' feelings and muddles through a difficulty because he finds thought tedious and difficult. But the practical man at his best uses emotional insight and thought in his work.

Assuming then that there is justification in calling a man emotional rather than intellectual, practical rather than emotional, it is clear that each will give the most marked proof of imaginative construction in the type of mental act most characteristic of him. Hence we get three main types of imaginative act—that of emotional or sympathetic imagination, that shown in intellectual discovery, and that manifesting itself in some material form.

For want of better terms they might be named sympathetic, intellectual and constructive imagination. But the reader should constantly remind himself that they are only named after the most characteristic feature of the act; thus the use of creative thought in the act of true sympathetic insight is great and in all probability a practical result will complete the cycle.

Sympathetic Imagination

The people who display this type of imagination are clearly those who not only have strong emotional reactions to experience but whose interests lie in the emotional aspects of life rather than in the intellectual. At their best, and probably the condition implies high intelligence, they are the people with a genius for friendship; when they are also endowed with zeal for some form of constructive work they make the poets and the statesmen of the world. Thus was Shelley.

But as teachers do not have to train geniuses but the touchingly friendly young thing whom we call the 'ordinary' child, it is far more important for him to recognize that these children have capacity for sympathetic imagination and from the earliest time they should be encouraged to give it play.

Probably if the theory holds good that the origin of all more complex emotional attitudes is to be sought in the feeling tone that accompanies or causes our innate behaviour, then sympathy has its beginning in that sympathetic induction of emotion which enables us to experience some vestige of an emotion that we observe in other people.

It is undoubtedly a fact that very young children do 'sense' with extraordinary accuracy the emotional atmosphere in which they live, and nothing is more important than that it should be happy and serene. As they grow older they must be helped to work out such feelings of sympathy in social acts, and the more we accept willing service from them, the better.

In many of the best homes and schools there is so much thought given to the children that no opportunities are left for the children to take thought for the older people, partly because teachers at least, and often parents, seem to think it is wrong to let younger people know one is tired, cross or worried. Yet it is by being helped to understand and being encouraged to take a share in bettering the situation that a child grows in sympathetic imagination.

Sympathetic imagination can only grow with knowledge and experience, and perhaps the intelligent child learns as quickly here by his mistakes as in any department of life. But he can be helped to learn and to extend the province of his sympathy by education.

In literature lessons little children best get understanding of other people by impersonating them, and all through school and university days dramatic work is of great value for this purpose. But in all literature lessons for older children, discussions on character, on the possibility of the plot, &c., should bring out the author's idea of his characters. Unless when a boy leaves school he is willing to be interested in the motives and characters of the people about whom he reads, his reading is not likely to extend

much further than detective tales. Again, the justification of the inclusion of geography and history in the curriculum for children leaving school as early as fourteen is that by good teaching of these subjects we can help them to live more sympathetically, and so imaginatively, in the world of to-day.

This growth of knowledge is the most potent factor in distinguishing the child's early sensitiveness to the feeling tone of others from the adult's sympathetic understanding of another's position. The adult, who is sensitive, still feels what others are feeling, or at the greatest moment of ignorance at least senses a feeling of tension, but he also can with very little help understand the problem and do his best to straighten it out.

To be able to grasp the facts, to distinguish relevant from irrelevant data in any difficult situation is, of course, of great importance, and one of the most important parts of education is to acquire the adequate training for reasoned judgements. But unless there is the sympathetic imagination which enables a man to feel, in some measure, how the other man is feeling, his knowledge may have only an academic value or may urge him to unprofitable action. Thus if an Englishman cannot feel how the French regard the Germans and how the Germans regard all the Great Powers, though his knowledge of European history be colossal he will not be able to act as a good European.

The statement that the wider a man's sympathies, the wider his interests, could as truthfully be stated, the wider his interests, the wider his sympathies, if every effort were made to achieve sympathetic understanding and conduct throughout his training.

Imaginative Thought

This label, attached to the type of imagination exemplified by the man who uses ideas as the material with which to construct new thought, is not happy. But the very

difficulty of naming the types of imagination points to the close inter-connexion of one with another. Thus we have just shown what a great part thought plays in sympathetic imagination and its part in constructive work is no smaller. Here, however, we have the case of the man intensely interested in ideas, wanting to know how and why things work and endowed with that power of creation that enables him to take knowledge a step further. That there are imaginative people of this type is clear and most of us know some few. Their interest is in knowledge, but they are no mere collectors of fact; to talk with them is to get new light on a well-known problem and, from less experience than more pedestrian thinkers, they make hypotheses, or throw out suggestions, that often light the way for less able workers. They are not necessarily interested in the practical application of their discoveries nor in their value to mankind, but they are nevertheless of inestimable importance, for they are the pioneers in the world of thought. They do, indeed, make new thought for us.

Such people are always among the specially gifted, and even the keen boy or girl in a school who is eager to discuss, to hear different points of view and to question other people's conclusions, would be found to have an I.Q. between 100 and 120. So also in all probability would the boy who showed originality in art or music, and there is no point in trying to place in order of intellectual merit the lover of mankind, the great thinker and the great artist. It is, however, undoubtedly true that the child with intellectual interests has a high I.Q., while average and indeed sub-normal children as a rule are interested in practical subjects and certain aspects of art. The education of intellectual children has been indirectly discussed in the section on gifted children,¹ but if there is any truth in the theory that we grow along the lines of our interests, obviously such children as these should be trained to think

¹ See pp. 55-9.

more carefully, to sift evidence, to acquire precision of thought and language. It is as dull for them to be kept at concrete work as it is for another child to be made to acquire generalizations without a background of concrete work.

Many children, for example, find no difficulty in mathematics, and to measure areas for a morning, to demonstrate multiplication of fractions when 'any fool can see you can do it in two ways', is to reduce them to boredom that verges on torture.

So, too, taking part in a history pageant may seem to them utter waste of time; but set them to find out how Elizabeth thought about a given event in order that some one else can portray the queen accurately, and they are kept busy and happy.

Constructive Practical Work

Here again terms are difficult, for all imaginative work is constructive and to solve a problem primarily concerned with the emotional attitude of A to B, to make a new generalization about the properties of matter, are in reality as practical and constructive as to paint a picture or to design a cathedral.

It may help the reader to understand this type of imagination and the importance thereof if he thinks of it as definitely artistic. The man endowed with constructive imagination is never satisfied until he has interpreted his pent-up feelings or his seething thoughts into some concrete form—music in some cases, a picture or statue in others, a great building, a mighty machine, a small household article, a suitable dress or a good meal out of next to no material.

I have given a varied list of examples of the results of constructive imagination, because it seems to me of great importance that teachers should recognize, respect and encourage it. The urge for creation of this type is very

strong in all children, and perhaps of all nations the British are most markedly practical in genius.

Thus if the teacher of music or poetry is wise he will make use of this love of creation and instead of insisting on patient memorizing of other people's tunes or poems, he will seek opportunities for original work—the song of triumph over something achieved or of welcome for a holiday, the verse for some one's birthday greeting and so on.

It is only when people have tried to do something for themselves that they are able to appreciate the efforts of others, and at any rate with most English children interest in technique only manifests itself when they need that technique for some purpose of their own. Give them a play to write and they will soon learn that the speeches must convey the necessary knowledge of past events, of the character of the person speaking, &c. ; in order to get help they will study the introductory scenes of various plays with great zeal. Give them a story to dramatize and they will be roused to real interest in what use Shakespeare made of Hollingshed's Chronicles. But to make a boy 'get up' Shakespeare's use of sources, quite apart from any work of his own, is to encourage unnecessary memory work at the best, boredom at the worst.

It seems a pity that there should be so much snobbishness among us all when we evaluate creative work. The practical man looks down on 'those artistic Johnnies', the artist calls the man who loves ideas and delights to discuss and use them the 'highbrow', who, in his turn, can express contempt for the two other types.

Of course the finest workers in any branch of life are modest of their own achievements and respectful of others', but even into school has crept the feud between workers in the various subjects. Thus the 'specialist' in mathematics, history or English is apt to assert that his work demands more intelligence and concentration than hand-

work and should have the best hours of the day devoted to it ; music is considered a ' fancy ' subject, and a child working for some examination can easily get excused from that or drawing.

All this sort of argument is nonsense and ignores the most essential rule in education that in planning a timetable, making a syllabus or arranging a course of study, we must, as far as is possible, consider the individual child. A child who is interested in some form of artistic work—music or painting for example—and who is fortunate in his teacher, will put more mental effort into that hour of his day than he will into the mathematics and history periods combined, if there he is bored.

To look down on handwork is to look down on children, for in the greater number of cases it is the way in which children acquire interest in knowledge and good technique. It is bad teaching that should be abhorred. The history teacher who teaches mechanically chapter by chapter, the English teacher who fails to use a child's love of rhythm and interest in people, the handwork teacher who dictates to a meek class what they are to make and how to make it and cares for the results rather than the process ; it is such as these that bring their subjects into disrepute.

In short, the best teacher in any subject uses children's creative powers to the utmost—calls forth their feeling for others to help them to project themselves into others' minds and understand others' ways ; encourages them to think imaginatively of results before undertaking the first step ; and above all he respects the work of the child's hands.

CREATIVE WORK IN SCHOOL

One of the tests to which the curriculum of any school should be put is the place it offers for all kinds of creative work. That school is doomed that thinks that ' making things ' is all very well in the infant school or kindergarten

or includes handwork as a sop to the Cerebus known as 'Modern Methods'; that allows two hours a week for handicrafts and for the rest of the school days insists on all children doing the same work, in approximately the same time. Whether the doom comes sooner or later depends on the enthusiasm of younger teachers.

It may be valuable for the reader to consider how the three types of imaginative work are carried out in a modern school :

Throughout the day in the good school a child is helped to gain sympathetic insight. He is to a very great extent a self-governing individual and thus learns how his acts affect others. When a practice of his is forbidden by his teacher, it is because his teacher has more knowledge of the results of conduct and can point them out to him. Thus Dr. Susan Isaacs stopped bullying among the boys in her school because she could see the effect on the bullies as well as the bullied.

In much of the actual work, more as the child gets to the senior school, his sympathetic imagination is used. A child interprets a story to a great extent only as he can put himself into the hero's place. At first he feels his smallness ennobled as he hears of Jack's killing the giant; later he lives the life of the knight or the great explorer or is helped to realize what it means to the Chinese to have Japan at their wall.

Always whenever it is possible the good teacher makes use of sympathetic imagination, both by giving the pupils material for it to use and by directing the feeling into active channels. The boy who has bullied a younger child and has been helped to see it is cruel must be encouraged to play the part of elder brother. The realization of some other nation's difficulties should make for an excellent essay or a fervent speech in the parliament of nations that the elder scholars have organized.

Any one who was first taught by the pedestrian un-

imaginative mathematician who demonstrated a rule, set exercises on it, corrected faults, and then went on to an imaginative teacher, knows how a pupil's intellectual imagination can be stirred. The facts that are collected, considered, tabulated and perhaps eventually generalized, the discussions on the bearing of the new fact or the use of some new skill or intellectual technique, the attempts to prove a statement or to test a conclusion, all demand a lively use of past experience in a new situation. If mathematics has been cited as an example it is because all but the best teachers seem to think that grind is of more importance than that free 'intellectual play' with abstract ideas that makes the study so delightfully exhilarating. Such work gives the student not only scope for creative thinking but also a standard by which to test his results.

All subjects properly taught encourage creative work : the story, poem and play in literature and history ; the travel talk, pageant, or new type of map in geography ; the attempt to demonstrate a hypothesis and prove it in science.

The teacher who rouses such imaginative thought in his pupils has his just reward, for to serve their own purpose, be it to solve a problem in mathematics or to make an accurate representation of life in India, pupils will collect information, memorize results and apply them with far greater zeal and success than is possible if the work is organized by the teacher and dictated to the class.

Enough has been said already of a child's urge to constructive work : to make songs, paint pictures, build cities or work out in some concrete form his own feelings and ideas. Clearly in the modern school the urge will be the basis of much of the work, and children will in many cases learn facts and acquire technique in order to satisfy their desire to create. Perhaps the simplest way of stressing the new motivation in education is to point out the change in the attitude to expression work. Formerly a teacher

tended to prepare a lesson on a certain section of his subject—English, history, geography, &c., see that it was carefully sectionized and then find some ‘expression’ work for the class to do on it. Often in desperation the teacher jotted down under the heading ‘expression work’ ‘answer the following questions’; sometimes when he was impressed with the need of handwork he would, for example, after a lesson on Japan, arrange for children to copy a Japanese picture. Such strained attempts to see that each section of a child’s mental work rouses interest, has a definite intellectual content which is then ‘expressed’ in tangible form, does not, as older teachers long ago discovered, take us very far. The child’s interest in Japan seems to evaporate just as quickly and he is seldom found working at the subject for himself.

But in the free school where creative work comes first, the child will be roused by some story or by some event in his own life to ask questions; he will be helped to find out the answers to his questions, and sooner or later, if it is anything but a fleeting interest, the boy will be making a book, planning an exhibition, offering a lecture or holding forth at the debate.

Indeed, far more time will be devoted to those arts children most delight to honour: music and dancing, art and its applications to building, decorating, sculpture, &c. In such a school it is difficult to say if the love of creating forces children to intellectual work more often than inquiring minds, searching into the whys and wherefores of the world they live in, compel them to express themselves in some practical form.

CHAPTER VIII

THE PLACE OF MEMORY IN THE LEARNING PROCESS

CONDITIONS FOR USEFUL RECALL

WHEN we look forward and use past experience as a jumping-board for the future, we are said to be 'imagining'; when, on the contrary, we recall the past and dwell on it we are said to be 'remembering'. This process of recall often takes place unconsciously and, as we sometimes say, recollections 'come' suddenly to us. At other times we consciously recall; some one says 'What did we do last Xmas?' and often by prompting each other we make a fairly accurate record of facts that had been apparently forgotten. Some facts we think we shall always be able to recall, with no prompting whatsoever, except the simple question—our names, addresses, simple techniques like spelling and writing, and above all, those experiences that to us have been epoch-making.

Experiences that have sunk into unconsciousness only arise under abnormal stimulation or in dreams, sometimes in a disguised form.

When we are thinking of the part that remembering plays in the learning process, clearly we should all desire that any one whom we were teaching should be able to recall the relevant facts quickly and accurately. To take a simple example, it is useless for a child to have to recall the five-times table with perfect precision, when all he needs is the product of nine fives, or the whole alphabet when what he needs to know is the relation of 'p' to 'n'. Nor is there

any sense in a child who is asked the capital of China frantically hurling at the questioner the name of every foreign capital that he knows until he comes to China on his list.

The value of speed and accuracy is equally plain. Hence one of the first needs of the learner is such help in the learning process as will enable him to recall at need the relevant material with speed and accuracy. As the conditions which ensure this result throw much light on the principles underlying successful learning, as well as successful remembering, it will be useful to discuss them further.

Relevancy

Briefly the main condition for recalling an experience is interest in the problem for the solution of which it is necessary. If a child goes into a lesson with his mind full of an exciting game that he has just left and is asked to give an account of some incident which he knew last week, as likely as not he will bungle his account. But if he is absorbed in the work of writing a play and that incident would be useful, in all probability he will be able to recall it with great ease; and what is more, it will seem to him to come into his mind as easily as his own name would.

Moreover, interest in some problem to be solved seems to act as a lever to the mind for facts and experiences forgotten for years; thus facts that we can't remember learning slip unobtrusively into our minds, sometimes indeed when the problem for which they will offer a solution is not in our consciousness. Hence the value of the discussion before a class turns to the continuance of some common activity. Many will contribute: 'I have an idea . . .', 'I have been thinking', 'I suddenly thought yesterday', &c., constantly introduce a statement of some remembered experience.

If the reader memorizes the following phrases:

Robin—garden

Rockery—red admiral

Oak—tits

and then is asked to say it in some other form, he will realize how we put purpose and form into the most mechanical of our memorizings. He learnt it in the order in which he expected to be asked to say it. He would have almost as much difficulty in memorizing it in a new order as he had at first.

It follows that all students, whatever age, should be helped to memorize for the purpose in hand. Thus in reading it only prevents speed and accuracy when a child has to spell out 'knock' before he can read 'knock', and one of the psychological justifications of the 'Look and Say' and 'Sentence' methods of reading is that by them children get the most useful memory image for the purpose in hand. Reading is a matter of visual recognition, not of letters as letters, or even always of words as words, but of significant shapes. Spelling, on the other hand, needs a very different technique that will be discussed later in this section. Again, the method by which children learn a table and then almost re-learn it for 'dodging', as it is so often called, seems an example of ignorance of the purpose in hand. A child should by an untold amount of experience, varying according to his ability for such work, collect the facts of number that it is valuable to know for normal daily life—simple products of numbers, weights and measures. If it seems valuable to him to have them in table form for reference, he makes his tables. But all the weight of suggestion should be used to encourage him to memorize a fact as a fact and not as a meaningless rote. When, for example, he has found $5 \times 4 = 20$, some one should say to him, 'Now that's a thing to remember' and presently recall it to him. He should, I think, make his own arithmetic notebook properly indexed, and the new fact would be entered with others he had found out about fives. But he should know it first, recall it frequently till it is unforgettable—like his name—and not memorize it in a table. Very often when a child has memorized such

facts as he has found out and tested for himself, he will, out of sheer pride of possession, memorize in table form to be able to say 'I know what all the five times make' just as another child will say 'I know all the poems or riddles in my book'. But the collecting of material is a very different matter from memorizing a table as a table or a set of riddles as a set of riddles.

This account of the functioning of relevant recall that singles out interest and purposive learning as the chief conditions, does in fact over-simplify the process, but it is most important for teachers to think of memorizing on these lines, and those who are interested in psychology as a science will go further into the matter later. There is, however, a warning that must be given. However interested children are in the work in hand, however carefully the teacher has helped them to memorize purposively and to abjure mechanical rote learning, a child will not always remember what he should, and many types of psychological or physiological upset can account for a child who generally seems 'on the spot' answering vaguely, recalling useless facts or blankly denying he ever knew. Indeed, memorizing is no more important than forgetting, and what a child forgets is not only indicative of his intellectual interests but also very possibly a sign of emotional difficulties.

Speed

It would be well if the reader could train himself to think of his mind as recalling, imagining, memorizing, &c., rather than to think of his good or bad memory, his imagination, &c. People so often assume that a good memory is some fairy's gift with which lucky people are endowed and that if one has a poor memory nothing can be done about it. Just as people who have been badly taught in mathematics declare with some pride that they cannot do mathematics, so do others point to their bad memories, sometimes subtly suggesting that their minds must be of excellent calibre

to enable them to do so well with so poor an instrument as their memory.

Now the same people would never complain of their mind and point out how splendid it is to have reached a given state of eminence in spite of a poor I.Q. Yet surely no sound theory of education can be based on any assumption but the unity of mind functioning sometimes in one way, sometimes in another; when we are dwelling on the past we are recalling; when thinking of the future and using our past experience, almost if not entirely unconsciously, as an aid to conduct, we are imagining; when thought is overwhelmed by some strong emotion we are feeling intensely.

It is wise to hold the idea of the mind as a structure, slowly growing with experience and able to function in multifarious ways, because it is a vital generalization that helps to simplify many psychological problems. In this case it will help us with the problem of speedy recall.

It is useful to be able to recall rapidly as well as accurately, but, clearly, men will vary in speed of recall directly with their temperament and sense equipment. If a child's reactions are speedy, i.e. he belongs to, say, the choleric or sanguine type of person, if he responds rapidly to sound or sight stimulus, he will be far more likely to recall past experiences quickly than the lethargic or cautious child or the child who responds slowly to sense stimuli. One is not better than the other, but one's 'tempo' of living is more rapid than the other's. Hence the first practical suggestion is that teachers should encourage their pupils to know more about their rate of learning and to use their knowledge to the best of their ability. The quick child will not recall more accurately by being forced to work more slowly; the cure is to train him to memorize more accurately in the first instance; the slow child is only flustered by being abjured to hurry up.

It is, then, not in the first case a matter of technical

training but of rousing interests and giving standards. Pupils who are interested in what they are doing, and have been helped to work as accurately and quickly as possible, will aim at using their own time to the best of their ability.

Accuracy

Whether we recall accurately or no depends to a great extent on how we memorize the original experience, but before proceeding to consider the process of memorizing it may be as well to face the fact that, far more than most of us like to acknowledge, emotional bias colours not only our memorizing but our recall of an incident.

Thus if an experience has been memorized unconsciously, as by far the greater number are, we only attended to those details that interested us—the voices and gestures of the people perhaps, but not their clothes; and yet because we tend unconsciously to fill in the gaps in our thought, if we are sure that the man with the defiant and assertive voice and gestures was guilty and another observer asserts that the guilty man was wearing a certain hat, we can almost be positive we also saw that hat.

Not only do we observe in part only and inaccurately, but we tend to recall what suits the purpose of our emotional state at the time.

The reader is not asked to take this statement on trust; not only can he consult the references at the end of the chapter, but he can with great interest, if he will be as honest as he psychologically can, test this human attitude on himself and his friends.

Probably, then, exact recall is as inhuman as exact observation, and except when it is the simplest facts that have to be recalled we can only help people to realize that fact and arouse in them the desire to be as accurate as in them lies.

If the teacher is thinking that this theory of the working of mind has no bearing on the actual work of 'teaching'

a child to memorize history dates, tables, &c., he is radically mistaken. Why do some children have so much trouble with the recall of certain apparently simple facts, the spelling of a word, a combination of numbers, when they recall other far more complicated processes with great ease? Why can't A remember when he gets into the library that he was to look up a given fact for X and yet remember to look up facts for B, C and D?

The truth is, accurate recall is almost entirely dependent on emotional stability and the pleasure, or at least absence of pain, associated with the experience to be memorized.

CONDITIONS FOR SUCCESSFUL MEMORIZING

The most universal psychological generalization is that experiences that are pleasurable tend to be remembered and recalled, experiences that are painful to be forced into unconsciousness from whence recall is normally impossible. Hence if a child memorizes a poem because he likes it and wishes to learn it, he will do so more easily and remember it longer—partly because he will constantly recall it—than if he is set ten verses to learn to which he is indifferent.

Again, to punish a child for not memorizing a piece of set work is to defeat one's aim: the child may force himself to learn it, but he will forget it as soon as possible—as examination candidates do when they merely memorize facts they need for the definite purpose of passing some test.¹

Secondly, if memorizing is looked upon as intentional habit-making all the reader's knowledge of this branch of psychology can be applied:² the need of active desire and effort, the value of repetition, and so on. Thus is

¹ This also is another example of purposive memorizing—as soon as the purpose is accomplished recall is impossible.

² See Ch. VI.

gained the effortless recall discussed early in the chapter, so that 'loveliest of trees', the seven ages of man, the formulae to be applied in mathematics, float into our minds when desired as easily as our names to our tongue or writing to our hands.

Thirdly, if the mind is to function easily and mechanically when it is necessary to recall some past experience, the actual memorizing—i.e. the making of a new habit—should not be attempted until the facts to be learnt are understood and part of an associated system of active ideas. This statement is perhaps most clearly illustrated by an account of the actual memorizing of a poem.

The learner first decides to memorize the poem because of some direct appeal it has to him and, as he should be encouraged to read widely and critically in his anthology, he will have read it more than once, gained a general impression of it, considered it carefully and unconsciously memorized some favourite words or lines before he decides to learn it. He thus gets to that stage when he nearly knows it and the actual memorizing will take far less time and be far more pleasurable. What is more, work memorized in this way becomes closely associated with other past experiences and functions naturally when called upon.

It is obvious how greatly the teacher can help in such work: to the child learning 'spring goeth all in white', it could be suggested that he thought back to his own experience of white spring, or of colour to describe a season; he would discuss the lovely use of such words as crowned, fleecy flocks, 'the cherry and the hoary pear, scatter their snow around'.

But the reader can work out methods of giving such help for himself, be it in literature, history, geography or a natural science. It only remains to give an account of the findings of experimental psychologists on certain technical points.

THE WHOLE VERSUS THE PART METHOD OF MEMORIZING

Woodworth in his chapter on memory gives the results of two experiments.¹ By one team a passage of 250 lines of poetry was learnt by heart, 30 lines being memorized per day and then the whole revised till it could be recited; by the other the passage was read straight through three times a day till it could be recited. The whole method took 348 minutes, the part 431. But when it came to teams of workers learning the correct method of solving a maze puzzle the team which came out best had learnt one part a day for four days and on the fifth learnt all the parts together.

Sandiford,² however, and Rusk,³ maintain the superiority of the whole or entire method. Rusk gives the following main reasons for his preference:

(a) Attention is more uniformly sustained as new material is continually presented.

(b) There is a more even distribution of repetitions, for in the sectional method learners repeat unnecessarily sections already memorized.

The material as a whole is impressed on the mind and the sense of the passage facilitates learning. But on the whole most experienced teachers will agree with him when he suggests that the compromise known as the mixed method is to be preferred.

Personally I prefer the method because it seems a direct application of the fact that if an experience is to be a living memory it must be a part of the structure of the mind and in no way learnt mechanically.

In this method the passage must be considered as a whole first and then in 'sense' sections, and those that are more difficult dwelt on and discussed so that before the final

¹ *Psychology*, Ch. III.

² *Life of School Children*, Ch. X.

³ *Experimental Education*, Ch. XIII.

memorizing the pupil has grappled with special difficulties and even memorized some outstanding passages. The 'whole' method should, of course, be used for the final memorizing.

I have summarized this piece of experimental work, partly to indicate to readers who will not be working in laboratories the caution with which they interpret results, for the experiment cited by Woodworth gives a somewhat different conclusion than the same material worked over by Sandiford and Rusk; partly because it will, I hope, suggest to him that if he assimilates broad psychological principles he has a great help in technique of teaching and special method. Thus Rusk's conclusions that lead him to urge the mixed method are almost identical with those suggested on p. 73. Indeed, a careful study of the making of habits would enable the thoughtful teacher to make his own scheme for memorizing.

THE VALUE OF REPETITION

The number of repetitions needed to impress a piece of knowledge varies from individual to individual. It will be undoubtedly smaller if the material is understood and has been considered carefully in some such way as suggested above and, obviously, if the learner wishes to memorize it.

Children can chant tables interminably, and not know them because they are making no effort to learn and even saying one thing and thinking of another. In the old days when many a girl was made to practise scales daily, the unmusical would prop a story-book on the music-stand and stumble through scales with her fingers as she used her mind on the book. Clearly little improvement could be expected under such conditions.

But teachers should encourage children to use their minds intelligently, and one thing each of us should find out is the best arrangement for the repetition essential

to memorizing. The results of experimental work seem to demonstrate the fact that for most of us a few repetitions at first daily, then reduced, say, to once daily and when known occasional repetition, save energy and time. As far as possible the whole method should be used because here the purpose is to know the poem or the summary in its entirety. The best number of repetitions depends entirely on the attention span of the learner,¹ which to a great extent depends on his interest and his will.

Woodworth² cites the results of an experiment which showed that 8 readings a day for 3 days gave the reader a score of 18, whereas 6 readings for 4 days increased his score to 39 and 2 readings for 12 days to 53.

The same spacing increased another unhappy person's score from 7 to 55! But it must be remembered that all such experiments are with nonsense syllables, and to make the experiment as reliable as possible, the agent should try to learn like a machine and not as an ambitious child eager to increase a score.

In most schools the plan of spaced memorizings is generally and rightly adopted, not only because it gives to the learner a greater number of fresh starts, and so puts off the weakening of effort by fatigue, but also because it ensures the mental impression surviving, since forgetting is much more rapid in the first days after memorizing than later. Hence daily recall—or in some cases, hourly recall—helps to overcome the strong tendency to forget in the early days of memorizing. Teachers would find it interesting to experiment on these lines. A large section of a class of children whom I know intimately made a point of memorizing their scripture verse during prayers because they knew it would be heard immediately after. Not one of them could say it two days after, whereas the good children who learned it in homework time revised it on their way to school and, if nervous, during prayers, re-

¹ See pp. 182-3.

² *Psychology*, p. 84.

tained it for longer and could be word perfect for the term examination with very little revision.

TRIAL AND ERROR RECITATION

On the whole, experiments go to show that the active attempt to reproduce what is known is valuable. Practical teachers would heartily agree. To shut the book and reproduce what is retained not only shows the learner where his faults lie and encourages him to overcome his difficulties, but it also gives a slight change of action and so prevents fatigue.

If the reader tries to say a poem x times (x varies with the reader) without a break, he will, at a given point, find he is passively saying it ; but if after $\frac{x}{2}$ times he tries to say what he knows, he will find that on the $\frac{x}{2} + 1^{\text{th}}$ time he is far more active !¹

Hence it is not only spaced reading or memorizing that is needed but constant practice in recall.

Teachers are at times loath to hear the child who says he knows a poem because experience has taught them that he will not ! But if a child thinks he knows a poem only inability to say it will persuade him that he is mistaken.

This is one of the numerous opportunities of helping a child to know his own mind, to be responsible for his own education and to respect other people's time. He should be encouraged to 'hear himself' and not ask for an audience till he has given himself a successful performance.

THE PLACE OF MEMORY WORK

We have dealt with the how and when of memory work ; the question of what should be memorized is to such a great

¹ Clearly the formula is symbolical and not accurate !

extent dependent on the learner and the purpose he has in mind that it is hard to write generally on it. Most educators up to the beginning of this century insisted on too much memorizing—and that by rote, to make matters worse.

Then there was a great revolt from such mechanical acquisition of knowledge based probably on the fact that though by 1910 we had a generation of people who had all been through some school, it was found that of actual learning they had retained next to nothing.

More and more educators accept the theory that children must be self-educated and that desire for knowledge, if only as a means to an end, is a *sine qua non* of true and lasting results. Such a theory stressing zeal, initiative, choice, first-hand experience and practical work can, if badly applied, leave little place for memory work and if examinations ever lose their function as classifiers of children, memory work may be pushed yet farther into the background. That might be disastrous, and even now many a learner—from child to university student—spoils his work because once having understood a process, or mastered the cause of a phenomenon, or seen through a classification that he must use constantly, he will not memorize it.

Surely such mental slackness is unintelligent, and why certain advertised nostrums for self-improvement are believed in and found effective is partly because the vendors give their buyers dodges of all kinds for memorizing essential facts. The broad road of psychological rectitude is far easier to traverse. 'In the first case every student must decide what is worth while for him to memorize, for no one wishes to go back to the days when history, geography, lives of great men were first potted and then learnt by heart.

If, for example, he finds it valuable to read a certain chapter of history, he should also find it valuable to be able to recall at least the main points in the historian's

argument. To ensure this ability he must not only make a good summary but also recall it to his mind and use it at frequent intervals. Some students, of course, always make intelligent notes and use them, set questions as they read and do not go on to the next chapter till they can answer them without referring to the book. But for one who does, in my experience, there are three who do not and who, as a result, are vague where they should be precise, and inaccurate when accuracy is essential.

No learner should be so rushed—at any rate in school days—that he cannot find time to make new knowledge secure and to memorize, daily, weekly and termly, till it is a part of his mental structure, all such facts as he must constantly use.

This gives us our second criterion for what should be memorized: such facts as will save time—tables, certain weights and measures, certain dates, characteristics of 'type' regions in geography, and last, but by no means least, spelling.

As all of us now believe in free work in English and do not check a child when writing a story because he spells phonetically, unless we can give our pupils a standard of correct spelling and then help them to memorize the accepted forms of word, spelling will continue to be a matter of individual taste.

Yet it saves a great deal of time if spelling becomes habitually correct and the standard is easy to give, for the more free and creative the work of children is, the more eager are they to write good stories that would be approved by a real editor. Magazines, letters to all sorts of people, class occupations—the postal work of the school, the diary of the class happenings, &c., &c., all raise a child's desire to write professionally and so accurately. Once he desires to spell accurately, his teachers must apply all available knowledge of the process of learning to help him in this particular case.

(a) Though spelling is needed for writing only, some few children learn so much more readily by ear than eye, that they must vocalize spelling.

(b) The children to whom sight is the best sense should spell well, and if they do not it is because they have learnt to read in large units and not studied the actual shape of each word. For this study they are now ready. They must be encouraged to look carefully, to compare with words that will help, to shut their eyes and see if they can see the word in their minds, to write it down and compare with the original and finally to write it in its correct place in the dictionary that they are compiling.

But immediate memory of the word is not enough and the teacher will explain to his class how much more rapidly we all forget during the first few days. Consequently the child must have a time set aside daily when he looks over the new—and less frequently—the old words in his dictionary; and from time to time the teacher must hear him. Spelling is important; it is with systematic effort on the part of the teacher and learner easily acquired; it is, as a rule, an excellent example of memory work that should find a place at least in all junior schools and for such children in the senior schools who still have difficulty with the art.

It is clearly hard for us to be patient with the type of critic who damns our work because an office boy spells Germany with a J; but it is probably equally hard for such a critic to realize that we do much for children although we have failed to give them so simple a technique.

CHAPTER IX

THE GROWTH OF JUDGEMENT

PROCESSES INVOLVED IN JUDGEMENT

FOR readers who have not thought what steps underlie the daily process of coming to a conclusion, it will be wise to consider how judgements are made before studying the growth of the power in children. A great deal of confusion arises because all technical terms should have a precise meaning, while such subjects as psychology, ethics and logic employ words which are the coins of everyday speech.

The reader will do well to think of judgement as a decision reached as a result of the interpretation of facts. Judgement, then, implies a problem that can be solved because the data necessary for the solution can be found. This fact is in itself fundamental, for it strictly limits the questions on which we ought to express a judgement. Thus A cannot judge such a statement of B's as 'that gave me the greatest fright in my life'. All he can do is to remind B of other experiences and ask him to consider them. But, given a suitable problem for judgement, the following steps are taken, though not necessarily in this order.

(1) A search for data on which to pass the judgement and at the same time rejection of all the facts that are irrelevant.

(2) Thus simultaneously with the search decisions are made, more or less consciously, as to the value of data in helping to a solution of the problem in hand; e.g. *a* is beside the point and rejected, *b* is rejected but suggests a possible clue *b*¹, *c* again suggests *c*¹; but a fresh fact *d*

makes b^1 impossible while e strengthens the likelihood that c^1 is a valuable clue. And so on. Throughout we work with our own equipment of insight, knowledge and store of experience; only practice and sound all-round education can improve our power of sifting evidence.

(3) Finally, we reach a judgement—in daily life somewhat in the form of ‘because of certain indisputable facts I have come to the conclusion that A is B’. But throughout the process, each time a fact has been rejected, reconsidered or accepted, a decision had been made. Psychologically it is interesting to note how great a part temperament and general make-up play in the sifting process. One man reaches his conclusion rapidly and cannot wait even to make a thorough investigation of the facts; often his conclusion is obviously unsatisfactory and he has to go over the ground again generally with some such comment as ‘I have forgotten to consider’. Another seems unduly meticulous and occasionally very trying in his insistence on knowing all the facts before he pronounces judgement. Nor must that fairly large class of people who have no respect for evidence as such and want above all things to demonstrate the correctness of a feeling be ignored, for it is they who remind educators how important are standards in judgement.

METHODS OF REASONING

A judgement is said to be reached through an inductive or deductive process of reasoning, according to which method of investigation has predominated. The process of Induction is fully described in any book on Formal Logic or Scientific Method. Briefly, it is that process of discovery by which a general conclusion, or generalization, is reached as a result of the investigation of certain data. Thus the Binet-Simon investigation of the facts which average children of a given age knew, quite apart from their normal

schooling, led to the generalizations that certain tests could be drawn up by which to measure the ratio of a child's intelligence to the norm.

Obviously such generalizations in the first case are but a starting-point for further work which either modifies the first result or shows it to be faulty. Thus Terman's modifications known as the Stamford Intelligence Tests have now largely superseded the original set made by Binet and Simon.

But when the generalization is found to be true it is most useful to apply it to particular cases to see whether they do or do not come into that class of experiences. In everyday life such forms of judgement are usually distinguished by some such phrase as 'A is a case of X' or 'Well, all instincts must find an outlet and curiosity is no exception'. The process is called deduction and there is for those logically inclined a beautifully worked-out scheme of the various forms of deductive reasoning—known as syllogisms—showing which are correct, where fallacies occur, &c. In ordinary life we do not, as a rule, use the complete logical form; we do not, for example, say 'Instincts which are suppressed are dangerous. This is a suppressed instinct, therefore this is dangerous.' But we do use the deductive process constantly, not only in mathematics and exact sciences but also in our daily judgements, for by the process we accept the experience stored in generalizations and use it to throw light on the problem we are discussing. Only experience, coupled with what native intelligence we have, can help us to class the special problem under the right generalization, and argument constantly goes on as to whether A is an example of generalization B or C.

The joy is that once we have assured ourselves that it is a case of B, all the experience, not only contained in generalization B but also in others that follow with or from it, is at our service. Thus if I decide A is a case of

a child suffering from suppressed curiosity not only do I have the use of the generalization that such children must be given freedom to ask and investigate to the very verge of human endurance, but I also use my own experience and that of kindly friends in the interpretation of what the generalization implies.

The reader will easily think out both the process of induction and deduction, and will see how they react on each other if he will consider how he solves the problems that have interest for him. He should, however, realize that there are as many, if not more, ways of coming to an incorrect as a correct conclusion and therefore try to safeguard himself against the most obvious pitfalls: allowing emotional or preconceived ideas to bias him both in the collection of data in induction and in the application of generalizations in deduction; misinterpreting data, e.g. declaring the child is self-assertive when he is only curious or frightened; generalizing from too few instances, the daily snare into which we all fall.

CHILDREN'S METHODS OF REASONING

The work of two investigators is of great value to teachers in the solution of this problem: Piaget has given a detailed account of his investigations and conclusions in his book on *Judgment and Reasoning in the Child* and Susan Isaacs in *The Intellectual Growth of Young Children*.

PIAGET maintains that reasoning is a function of social life, for it is only as members of a community that we are called upon to make explicit to others how we have reached a conclusion, what we are doing, what must be the next step in the process, &c.

He thinks therefore that before the age of eight, reasoning on logical lines is uncommon in children, mainly because till that age they are what Piaget calls 'ego-centric', i.e. they take for granted that the world is as they see it and

their thoughts are as obvious to others as they are to themselves. Piaget, indeed, maintained in an earlier work, *The Language and Thought of the Child*, that for the most part a child's expressed thoughts are monologues. Certainly if this is so it is an added justification for both giving young children uninterrupted hours for solitary play and also for encouraging them to share rather than to accept ideas. If children look on us, as Piaget suggests, as foreigners, how boring it must be to have to try to understand many of our commands.

What, then, does a child use instead of reasoning in his explorations of his universe?

He can connect facts together that he sees together—obviously from an early age he connects a bottle with food and he soon takes as an essential part of manhood certain characteristics, a deep voice, a stick, a hat. Again, Piaget found most boys under eight in Geneva thought that the moon followed them because as they ran the moon always seemed to move with them. As the boys felt sure that it was so, the desire to test their belief was not spontaneous. There is a youthful assurance about the correctness of statements that, though delightful, should fade with experience. Thus a child under six, asked to estimate which of two weights is heavier, which line longer, hardly ever hesitates. Nor does he easily learn by experience, for while he is the centre of his own universe he uses thought to satisfy desire and not reason which asks for an adherence to accepted standards of truth.

If then the child is to feel the need of proving his statements in ways to which other people will assent, he must in all probability find himself in a community that he cannot understand and which he cannot shape to suit his desires.

Thus his mental life seems to have three stages, a personal view-point, an understanding of the view-point of others and finally an understanding of relations of part and

whole, cause and effect, space and time and space to time, &c.

It seems, therefore, that a child's educators must at the fitting time encourage social contact, refrain from making a child's world such a 'nest' for him that he never or seldom experiences the feeling of 'disadaptation', as Piaget calls it, and, finally, encourage him to connect active experiment with verbal expression, for it is one thing to feel that a square peg will not fit into a round hole, a very different thing to appreciate it as a verbal generalization.

There is a good deal of divergence between Piaget's findings, based on the study of large numbers of children and those of Susan Isaacs based on actual observations of a few who were very intelligent. She found, and indeed most of us could add to her list from our own experience, that children certainly apply general knowledge to new situations—practical deduction—and that they do use the inductive method to add to their knowledge. Nor does she consider children as ego-centric as Piaget does, for she cites many examples of social exchange of knowledge—generally introduced by questions beginning with why—that originate a discussion among a small group.

She also points out that children seem first to make such judgements as predicate an attribute of a subject, e.g. this is nice, that is nasty. This we should expect, for they are based on sense experience and are an expression of pleasure-pain feeling.

It is some time before they seem to compare two experiences and hence words like lovelier, longer are used at a later stage than the positive form. This fact also corroborates Piaget's statement that relationship is apprehended later than disparate facts.¹

When a child gets to the stage at which he is beginning

¹ But when passing judgement on the value of means to accomplish a practical end, a child of five will constantly use such comparatives as 'this is better'.

to understand relations, those of space are mastered far more easily than those of time.

TRAINING IN JUDGEMENT AND REASONING

On the whole, it seems to me that one is left with three generalizations on which to base our educational practice.

Children's processes are very like our own, for even allowing for Piaget's belief in the ego-centricity of children and their need of training in reasoning through social contacts, we too seldom realize the weakness of our case until we have to convince another.

Judgement grows with pondering over experience and the imaginative use thereof; to make our judgement explicit and show the steps we have taken to come to a conclusion is not only a matter of making ourselves clear to our community—or sometimes to ourselves—but also of respect for intellectual probity. Hence here the help of the educator is needed and an intelligent well-educated child of ten often reasons far better than the uneducated man of fifty.

Lastly, as Susan Isaacs points out, the process of growing older—the technical term is maturation—carries with it increased knowledge, wider experience, and so possibilities of better judgement.

Perhaps the most important fact for teachers to remember is that there is no short cut to training in reasoning or judgement. How a man reasons and whether his judgements are fair or no depend so much more on his knowledge of the subject, his capacity to consider facts that gainsay a preconceived opinion at least as willingly as those that support it, that no training in a laboratory or in the mathematics class is of much value unless it is part of an education that inculcates respect for learning and understanding of accuracy. The conditions of transference of training hold here as elsewhere. Only if mathematics or science, or,

indeed, any subject, is taught in such a way that the pupil learns to respect its methods, is there a reasonable chance that the training acquired from the study of that subject will be transferred to the affairs of everyday life. It seems, then, to come back to the old story of standards—held and approved by a child's community and slowly adopted and, it is hoped, improved by him.

In all subjects when reasoning is necessary and a judgement must be reached, it is the class that must reason, it is the class that must reconsider its judgement and apply it. Never should pupils become a passive audience to a teacher who carries out all the processes.

Partly because there is still far too much importance attached to results, children very frequently memorize the steps of an argument that they cannot properly follow since they have not had the necessary experience to enable them to see why certain facts have been considered, others ignored; why certain applications are dubbed important, others trivial. Thus a girl of thirteen who had just been taken to see Blenheim Castle gave as one of the most important results of Marlborough's wars, that he had been given Blenheim Castle. She had, of course, learnt the list of results from her history book and as the wars meant as little to her as they would to Hecuba, and Blenheim on a summer's day meant much, she made her own selection. Her history mistress reproached her for a 'trivial mind' which worried her considerably and helped to make her feel history was a subject she could not 'do'. Such an experience would be impossible to a girl in a modern school where the history teaching was good. As a child in the lower forms her zeal for stories, for acting and for constructive work would have sent her to books to find adventure and to help her with her historical play or pageant. Later she would have been given a simple source book and encouraged not only to find out as much about the life of the period as possible, but also helped to see how the

historians use the facts, how difficult it is to say which is more important or more likely to be accurate and what standards must be used for such work. Then in her own reading of history she would have had some idea of the relative importance of historical facts and some small power of estimating them.

This, then, is the first condition of training children to reason and draw careful conclusions: that in every subject in which they are interested they are given help in careful selection and use of evidence. This statement does not imply that children should never be asked to follow very closely the steps of another's argument—an excellent and interesting piece of training whether in mathematics, science or in the humanities. But just as it was suggested¹ that children should be encouraged to make verse, music and dance before they studied carefully others' work, so should they have constant practice and help in reasoning and judgement before they are asked to appreciate the work of others. Thus too they follow the psychological order suggested by Piaget and Susan Isaacs; for when trained to use evidence for the solution of their own problem—be it acting or writing a book—they are doing work of more personal interest than when following the verbal argument of a mature thinker, an argument generally too abstract for their age and capacity. So much for the general thesis that training in reasoning is a matter of good all-round teaching in every subject. There do, however, seem to be some minor points that it might help teachers to consider.

In the first place though, as Susan Isaacs points out, a child cannot be supposed to follow an argument, much less construct one, on a subject outside his experience, yet a good many problems are possible for him to solve practically and he should be encouraged to do so—how to fix wheels on a cart, paper a doll's house or cover a book, work a

¹ See p. 94.

shuttle, organize a system of safe traffic signals or make a map to a hidden treasure.

Now on such problems he should be encouraged to talk and in friendly discussion he will gain practice in stating his reasons, getting his conclusions criticized and altering his views on his own work. A good many people who are excellent in a practical situation can only help others by doing the thing for them; that is a pity in itself, but it is worse when they can brook no criticism because they have had no training in verbal expression of their judgement, and worst when they say 'I never could argue'—a confession of bad early training as full of implication as the 'I never could do mathematics' that we discussed in an earlier chapter.

Speech is not every one's chosen medium for self-expression, but it must be possible to use it as a common medium. Children who have grown up discussing their practical work, stating their reasons for choice of material, evaluating their successes and failures are on the way to be educated folk.

Secondly, it is wise to remember that a child grows up very rapidly, and one of the most marked signs of maturation is the increased power of reasoning. This is partly accounted for by the fact that we can only reason on material that is within our experience and not till a child has some appreciation of space, time, position, &c., can he reason on these matters.

His experience, even at sixteen, is still often limited compared with that of his teacher and his judgements are correspondingly crude. But it is the function of the educator to notice where the lack of experience is most marked and to try to make up the deficit. Thus if a boy of fourteen who has become an ardent Hitlerite asserts that Hitler has made Germany an obedient, orderly and extremely efficient country, he should be given a chance of studying the Germany of pre-war days. To contradict,

to say he is ignorant of facts is worse than useless and no argument. Further knowledge is his need in this case.

Finally, there is every reason why children should be helped to formularize their reasoning whenever to do so will make the process clearer and more useful, either to themselves or their community. And it must be remembered that though he keeps his science notebook under the heading 'what I have observed', 'what conclusions I have drawn', though he makes clear statements in his mathematics and shows his working step by step, there will be no 'transference' of the method to history or geography, much less to everyday life, unless his teacher lights in him the desire for clear statement and sound judgement.

Only in the class-room where discussion is free, contradiction that is well grounded, and criticism based on desire for better results, the order of the day, will the children learn to state reasons, weigh evidence, verify their own and others' references and see that the conclusion they draw is in accordance with facts as they know them. Such training can be given in any subject and of such training is the stuff of education.

CHAPTER X

TRAINING IN COMMUNITY LIFE

A CHILD'S NATURAL INCENTIVES TO SOCIAL LIFE

WHEN we were considering a child's first reactions to his world,¹ it was pointed out that he could only make his interpretation in light of his own experiences and that on this interpretation—never fully in accordance with reality and often in almost complete disaccordance—he acted.

If his own weakness, littleness and helplessness are the characteristics which he wishes to overcome, then he is likely to imitate and adopt the manners and customs of the older and more powerful people whom he meets. Thus from his earliest days of conscious striving, he seems to have an inner urge to make himself one of his community.

We all know of the effect of older people on little children: the little boy who insists on playing the same game as his elder brother, and joining his expeditions; the, perhaps, unconscious imitation of his brother's or father's mannerisms; the family tricks of manner, phrases and accent, and so on.

The tendency to imitate is, I suppose, one of the most potent factors in community life and whether it is an innate propensity or no, it is certainly displayed very early, earlier indeed than that desire to work and play with the community that is said by many psychologists to be the manifestation of the 'herd' instinct. In the early years of life a child is so busy adapting himself to his world,

¹ See Ch. V.

experimenting with his environment, so ego-centric, as Piaget would say, that though his imaginative and imitative play teaches him a great deal about his social environment, he does not want to feel one with the community and share their thoughts and feelings.

It is later, somewhere round about seven, that the tendency to join others in play and occupations and even to sacrifice much in order to play with them becomes apparent. Now arise all those fashions with which teachers are so familiar and which seem to have an irrational hold on some men and women for the rest of their lives. Thus a boy must have exactly the same kind of bag as the rest of his class; a girl the same kind of red ink pen; the same slang is heard everywhere and for a quality that is not popular in his class, a child may resent even praise.

Again, a child with highly developed sympathetic imagination will fail to feel sympathy with a teacher or a classmate whom the class dislikes, while the least imitative will ape the fashions and manners of the group leader, though he may be far less intelligent or educated than many of his imitators.

Nor is it only feelings that are caught and acts that are imitated, for all of us accept ideas without demanding logical proof and, when under the influence of a strong leader, the crowd seems capable of accepting any statement. This power of accepting unproved statements is called 'suggestibility' and the acceptor is said to be under the influence of suggestion.

After a term at boarding-school an averagely intelligent boy came home to a musical, international and polyglot family with the following ideas held tenaciously and proclaimed *ad nauseam*, 'It's all bunk to work for the League of Nations'; 'only softies play the piano'; 'it's no good swotting over Latin unless you are going to be a school-master—Englishmen needn't bother to learn languages'. This sudden change of attitude throws a good deal of light on the working of the immature mind.

The boy was the youngest of a very able and friendly family and, till he went to school, his affection for the members and his respect for their maturity made him accept unquestioningly their opinions, their habits and their practices. But the danger of learning through suggestion is that, as the judgements are not founded on experience, once a new community is entered as likely as not a new and entirely contradictory set of ideas will be accepted.

What is more, if the first set of ideas is based on prestige suggestion—acceptance that is given because the child admires or is overawed by the suggester—and then the child experiences acutely community feeling for a set of boys of his own age, feelings are so strong an urge to acceptance of belief that the earlier ideas will be discarded as eagerly as childish games or clothes.

Though the bulk of man's opinions are, of course, non-rational, nevertheless if a teacher wants to send his pupils out with some ideas and ideals that will be held fearlessly till judgement does them change, he must not rely too much on suggestion, though his prestige with his boys will tempt him to impress his beliefs on them. The feeling for the crowd with its accompanied heightened tendency for the individual to feel as his community feels, think as they think, and act as they act is the natural way in which a child is changed from a self-centred to a crowd-conscious individual; though he never went to school or received formal education he would by such means grow to be one of the community in which he lived. But a great part of the work of educators consists in educating the crowd, and that problem we must now consider.

THE TEACHER AS A CROWD LEADER

So conscious are teachers of the influence of the crowd upon the individual that they make every attempt to get 'the tone' of the school in harmony with their own

standards. Teachers use their very great power of prestige suggestion to arouse in school the spirit of fair play, honest work and conduct ; if they succeed in getting the crowd leaders to think and feel as they do, the battle is won at least as far as school is concerned. Such a teacher might fairly claim to be a ' super-crowd ' leader, but what kind of citizens are made in his class will depend on his ideas as to how far he should try to shape young growing people and to what ends.

Let us take the question of the ways of legitimate and useful influences first.

In the first case, before the time when a child feels himself one of a crowd, suggestion is often the only way of giving him standards and inculcating habits. If a child lives in a community where friendliness is the order of the day, truthfulness is assumed and cleanliness practised, he will tend to accept such ideas, to feel friendly and do as the others do. If he is violently contra-suggestant—desires to say No when others say Yes and always to follow his own course of action—it may be a symptom that he does not feel at home with the community and at once every effort should be made to find out the cause and remove it.

Secondly, as the children get older and more interested in children of their own age, they are less dependent on elders and, as far as possible, both teachers and parents should try to let them educate themselves and each other. They must more and more learn by experience that careless work punishes itself, that selfish conduct spoils friendship and play, that in many cases only practice makes perfect. They should, in other words, be shaping themselves and each other into being citizens of a civilized world.

But such growth is not easy and at any moment either an individual or a group will need help to enable him to act socially instead of egoistically ; here is the opportunity for the teacher.

Susan Isaacs maintains that it is when children look

upon a teacher as their good self, their super-ego, that they will be led happily by her and take her ruling as to what is right. 'It is', she writes, 'her proved mildness, reliability and love which enables the children to pass from the defiant obstinate phase of growth, to this of friendly trust and free co-operation.'¹

Similarly with older children the teacher must be on the side of rational judgement against group prejudices, the right of the individual to think for himself against mob judgement, of social behaviour against mob rule. Probably, if the school is good and the majority of children come from good homes, he is still acting as the super-ego for many individuals, since they know that they should think for themselves and that coercing people to act alike is often cruel and always unintelligent. The teacher, with his wider experience, his more stable character and determinedly held ideals, can only be a true leader if he gives of his wisdom, his experience, and his tolerance to the class. Too great a reliance on suggestion is unwise, for the very fact that a teacher stands for a more mature judgement and attitude towards life makes his influence sufficiently great. What he must try to do is to encourage the class to 'disintegrate' as it were into a body of individuals and to discuss openly and impartially the difficulty—the boy who cheats, or who won't play games, or is for some reason despised or disliked.

EDUCATION BY THE COMMUNITY

The teacher, then, knowing that children of all ages need help in living socially and must be strengthened in their resistance to egoistic urges and desires, will act as a wise guide, using suggestion if necessary, doing all in his power to rouse feelings of friendliness and co-operation.

Even the normal child has to go through many struggles

¹ *Social Development in Young Children.*

if he is to shed his ego-centric self and become a valuable member of his community; but the child who has made a false start, who has learnt to get his own way by anti-social conduct or who is afraid of his community must have special attention and, perhaps, here lies one of the most important parts of a teacher's work.

But the more difficult the problem, the more must a teacher rely on using the natural educator in social life—the child's community.

An old farmer in Cumberland insisted even during his busiest season on taking two hours' rest in the middle of the day and when twitted with it by his active wife always said: 'Let Sun do his share.'

Perhaps teachers, too, could get equally good results if they would rely more on natural methods of growing and refrain from trying to force growth.

In such a policy of passive waiting Piaget pins his faith. He made a long and very careful investigation which is described in detail in *The Moral Judgment of the Child*. As a result of his study he drew conclusions that have definite educational consequences which he thinks all parents and teachers should consider. They can be briefly summarized as follows:

(1) The results of child study are obviously as unfavourable to method of authority as to purely individualistic methods.

(2) It is absurd and even immoral to impose on children a fully worked-out system of discipline when the social life of children among themselves will give rise to a discipline infinitely nearer to inner submission which is the mark of adult morality.

(3) It is idle to try to transform a child's mind from outside when his own taste for active research and his desire for co-operation suffice to ensure a normal intellectual development.

Therefore the adult must collaborate with the child and not try to master him, either in rational or moral training.

(4) Conversely, it is unwise to rely on biological nature alone to ensure the dual progress of conscience and intelligence when we realize to what extent all moral as well as all logical norms are the result of co-operation.

(5) Therefore it is wise to try to create schools where individual experimentation and reflection are carried out by all and yet all come to each other's aid when necessary. - Here, then, we have two psychologists advocating self-activity and communal life in the schools. Adler would maintain that a child cannot live happily unless his scheme of life entails social conduct. Piaget finds that the transition from a child's ego-centric view of conduct through imposed morality to the inner submission, which is the mark of adult-morality, must be effected by the realization of the social needs of other children and, eventually, adults. In other words, the life of the child must be such that he sees for himself the value of sharing in community projects and assuming responsibility.

It seems to follow that teachers must take children as they are and not try to alter them by compulsion. They must try to find the key to a child's naughtiness, or inability to fit into the life of the school or home, and they must do everything possible to alter his attitude to life. Compulsory change of the expressive action is worse than useless and, for example, to force a child to say he is sorry only strengthens his craving for power so that he may be able to compel rather than be compelled.

This alteration of the attitude towards life should be on the lines that Piaget suggests are normal. The ego-centric child, all but oblivious of other people's points of view, must by discussion and play with his fellows learn that they too have their rights, that they do not necessarily understand what he says nor, understanding, approve.

Adults also should discuss the problems of conduct as much as possible with children and never imply that they find it easy and simple to be good. Piaget thinks the

attitude of parents and teachers to children is most important in this respect, for if children love and respect their elders they tend to look on them as omnipotent and to accept external authority implicitly. It is not that the acceptance of external authority is necessarily wrong—indeed, it is a stage in moral development—but it must in its turn give place to the individual's ideal of good conduct.

It is clearly seen that the life in a free modern school makes the right environment for a child far more possible than did that of the ordered directed day in the formal school. In his play, in his communal project or occupation, in his free discussion and his individual work the modern child learns the pleasures and pains and responsibilities of social life. In a free class a child spoilt her painting because the last child who had used the brush had left it dirty. The rest of the children grieved with her and decided that for the future all brushes must be cleaned before being put away. They saw that it was done.

A child who had found that he gained consideration at home by being unwell became a gay, happy worker in a class where they were making a railroad, mainly, I think, because he turned carter, using his own cart for the purpose, and was much sought after to help. Here his desire for power was satisfied in a legitimate way. No one, indeed, who has heard a child of three helping to clear a table saying 'Aren't I being useful' should fail to realize how easy it is to utilize a child's love of feeling important.

Such training should not end when a child leaves the junior school. Such activities as organized and team games, the supervision of the younger children by prefects, such social duties as fall to the lot of monitors are not sufficient. It is, of course, a great reform that in most schools the scholars are now given much more responsibility for their own work; it is hardly possible nowadays for a child who is told that she will fail Matriculation if she

does not work harder to reply, "But I thought you had to get me through." But in many schools more still remains to be done.

For instance, community projects, the method most loved by children from seven to eleven, should be encouraged and such activities as the school play, the annual picture exhibition—with all the paraphernalia of a hanging committee, honours such as R.A. and A.R.A., the school orchestra and glee club, the Arts and Crafts Exhibition at Christmas should be as much a part of the school life as they will be of the educated community in which the children will, it is hoped, eventually find themselves.

Nor should such activities be imposed on the children by the staff. To entertain the parents, staff, school and governors with a play should be the scholars' work. In the junior school children often organize such activities spontaneously and certainly most children have done something of the sort at home. Parents and teachers are, of course, consulted and even occasionally asked to a dress rehearsal or a private view, and the intellectual training should be such that children ask advice when they can't get on and take criticism cheerfully. Here is an obvious case when the teacher acts as a crowd leader; he does not try to impose his own standards of taste or technique on the children, but he sees farther than they, knows that they won't get the result they desire without further work, or a change of scheme, and makes appropriate suggestions.

Finally, there is no better means of raising standards effectively and naturally than by staff and scholars working together to produce a play, organize any form of exhibition or give a concert. Here is the opportunity for the older and more skilled workers to take responsibility and for the younger to take help. Just as in the days of apprenticeship the beginner learnt by working with and for the expert craftsman, so do those of us who are less talented or less

skilled learn by working either with a professional or the better amateur.

Many a student from a university or training college would say he first learnt to act under such conditions or first learnt to sift evidence in a small and friendly seminar. The knowledge of what it meant to him to take however humble a share in an enterprise with far better people than himself will make him, at any rate, a ready convert to the idea that it is working with the expert, rather than for, that trains.

FORMAL TRAINING IN SOCIAL ETHICS

There are certain subjects specifically introduced into the curriculum with the view of teaching social conduct—to some extent religious teaching has the aim in view while citizenship, covering a somewhat heterogeneous mass of information and activities, is introduced solely with this aim. Most history teachers would assert that their subject was the most obvious and direct means of instruction in social life and certainly geographers could find much evidence to substantiate their claim, for they have great scope in enlarging the sympathetic imagination of their pupils. Musicians rightly claim the possession of a language rousing international response and modern language teachers could, of course, have the ball at their feet.

The fact that there are so many just claims to teaching social ethics in one of its forms surely points to the suggestion that it does not directly depend on any body of subject-matter or any special method. History could be used to train a belief in dictators, geography to glorify great empires and, if it is maintained that we should first learn to be good citizens, citizenship could bring up a generation of very little Englanders. Moreover, direct instruction tends to defeat itself, for as the prestige suggestion of the teacher wanes and the new generation

feels its power, time after time we find a reaction from the views of their elders.

Yet much can and should be done and the prospect is all the more hopeful because so many people can take a share in the training. It is not a case of teaching definite facts, but of encouraging in all learners an attitude of interest in what the other man thinks and feels and why he acts in a given way. The historian who shows the English boy that France had a different point of view of Henry V's virtues, or the geographer who helps his class to see how Japan feels about the Australian empty spaces ; to come nearer home, the domestic science teacher who gets a class of girls from comfortable homes to work out the best method for a mother to bring up children on the dole : all aid in educating children to think and feel socially.

To help towards better understanding of men and to those larger sympathies that are an urge to helpful action is undoubtedly one of the most important aims of all educators and in many ways a direct responsibility of schools. Such an attitude is characteristic of men of liberal education, and schools should be judged by the way the men who were trained in them think, feel and act. But how actually men act, what attitude they take up towards the great problems of life should be their own concern.

At school they will have been trained to think and all that entails ; their sympathies will have been widened and social action encouraged. But the teacher who impresses on the plastic minds of his pupils his own pet theory of government, his own views of social theory, his own panaceas is overstepping the mark. Consciously to drill the young to think and feel and act in a definite way seems to me ethically unsound. The pliant and docile accept through suggestion, the self-willed join the opposite camp. All fail to get that driving force that only comes from self-

acquired ideals. How these ideals are obtained, how character, or mind in action, grows are problems connected with the training of the individual.

From egoism through 'herd life' the child slowly emerges to become eventually a self-governed individual. During his first stages of education every effort must be made to help him to live happily and intelligently with his fellows, but success in the later stages depends greatly on the emotional and intellectual attitudes that the youth adopts towards the members of his society and its problems. Hence for the next three chapters of this book it is with the growth of sentiments and the stabilization of character that we are primarily concerned.

At first sporadically, later more steadily, the child finds himself in opposition to the thoughts and actions of many people whom he knows. If he is not so dragooned that he suppresses his individual likes and dislikes through fear, he will slowly evolve his own system of ethics, his own intellectual interests and a practice of his own. The higher his intelligence, the stronger his emotions, the more likely he is to make his own standards of conduct; but even the average member of a free well-educated community constantly thinks and acts for himself. Hence it might be said that on our way to maturity we travel from the self-centred period of early childhood through the community life of boyhood out again to individual life. But it is a very different individual; acutely conscious of his fellows, acutely aware of where and how he differs from them; equally sure of his own interests and only checked from pursuing them at points because of the social conscience he has acquired during his years of childhood and early adolescence.

To some extent the new individual—his own judge and his own law-maker—is the result of the training he acquired in his community. But other forces have been at work also; for instance, his emotions are less variable and con-

cerned more constantly with certain people and ideas. His actions can be more easily predicted. Psychologists would say that he has sentiments instead of transitory emotions, character in the place of impulsive action.

CHAPTER XI

THE GROWTH OF SENTIMENTS

CHARACTERISTICS OF SENTIMENTS

A SENTIMENT', according to McDougall, 'involves an individual tendency to experience certain emotions and desires in relation to some particular object.' ¹

It is wise to keep the word 'Sentiment' for such organized systems in our emotional life and to use 'emotion' to distinguish that feeling tone which accompanies those simple and natural actions which some psychologists call instincts. Thus fear is an emotion, hatred a sentiment—often having its origin in the primitive emotions of fear and anger. The common characteristic of the emotion and the sentiment is that each arouses a need of action. The action resulting from emotion is more direct and simple—an angry child hits, or breaks the object, stamps his foot, or uses some form of expression possible to him. But the man who is suffering under a strong sentiment of revenge can spend untold thought and time to carry out his plan. So close is this connexion between emotion and 'conation', as the striving to action is technically termed, that McDougall asserts that we can recognize introspectively the strength of our emotions by their conative intensity. For example, at its worst jealousy is accompanied by craving for action that leaves no rest. Introspectively the reader can verify the relation between emotion and impulse to action—though the impulse to action varies to a great

¹ *Outline of Psychology*, p. 419.

extent with the temperament of the individual. Also, it must be remembered that in the social individual who has evolved from the anti-social child there is such a thing as negative action or restraint. How great a man's anger is can often only be known to himself, for he alone will realize how much self-control was required to enable him to refrain from action. That he does refrain can only be accounted for by the fact that he has slowly acquired a sentiment towards self-control which compels him to behave in a certain way.

The reader will gain a better understanding of sentiment if he will use the knowledge that he has already acquired from Chapter VI on general attitudes or mental habits: just as a mental attitude tends to promote definite lines of behaviour so also does a sentiment, the difference lying in the ratio of emotional content. Thus the attitude that might in ordinary speech be called a high standard towards neatness has had its origin in many experiences and to a great extent is a reasoned conclusion on those experiences. But as was shown previously the mind works as a whole and there is not one compartment which is rational, one emotional and another conative. There is always an emotional tinge to a general idea that is living and active. It is true a man may say 'neatness is a good quality' and live in a muddle of mismanaged possessions, but in such a case his attitude of mind towards the quality is one of indifference—the emotional colouring is, as it were, negative, and might be better described as dislike for the active effort necessary to achieve neatness. There is, in other words, no feeling that will rouse him to action.

On the other hand, there are people who love order to so great an extent that one can say that they have a sentiment for orderliness, meaning that the most characteristic side of the attitude of mind is the feeling aspect. There is, of course, an intellectual content in the sentiment, just as in the simplest of psychic experiences we can find

emotional tone, intellectual perception and action, but the drive comes from the strength of the feeling.

If the reader can train himself to think thus of the mind working as a whole and to remember that whenever one speaks of a state of emotion, intellect, or action, all that may be assumed is that the psychic state takes its name from that aspect of the act which is most marked, he will not only find mental life far easier to understand, but also have a valuable touchstone by which to judge new methods. For an uncompleted psychic act, i.e. one in which either the emotional, intellectual or active aspect is ignored, leaves the agent unsatisfied; consequently teaching which ignores interest, understanding or action is unsound.

By a sentiment, then, we mean an attitude of mind, characterized by a strong feeling that compels a man to act in certain ways if he is to regain peaceful equilibrium.

Certain other characteristics, also, common to all attitudes of mind, will help us to understand how sentiments grow.

In the first place, a sentiment is part of the structure of the mind and no great hurt can be effected in any sentiment without serious results. They are of slow growth, for the most part, with their origins in the unconscious depths of the mind, and, though they may remain quiescent for long periods, once they are roused by appropriate situations they seem to compel appropriate action. Sometimes, for example, a friendship that seems to have lapsed is roused to extreme activity by news of the friend's difficulties. The intense hatred for war that many of us feel may lie dormant through months of happy life, but the first threat of it, even casually gained from a foreign correspondent to a newspaper, can be accompanied by the physical sensation of sickness, so characteristic of painful feeling, and a yearning for power to *do* something that can become almost unbearable.

In the second place, they are complex states and have

associated with them an equally varied intellectual content.

Thus one would suppose that a sentiment of love for a friend would urge definite types of action and rouse definite types of thought. But in actual practice this is not so ; love may blind one at times, but at others heighten perception extraordinarily ; many a man, indifferent to most people's conduct, is acutely critical of that of his friend.

Hence, thirdly, the test of a sentiment is that it necessitates the subject's experiencing certain simple emotions of anger, fear, pleasure or pain and acting in definite ways. The man, sick of self-love, who is humiliated will resort to amazing self-deceptive intellectual feats to rehabilitate himself ; the ' good ' hater is roused to anger and thoughts of retaliatory acts by incidents that pass unnoticed by his companions.

ILLUSTRATIVE EXAMPLES

McDougall gives as sentiments love, hatred, contempt, respect, tender passion and self-regard.

There are general conditions of growth that are common to all sentiments and again much help is forthcoming from the study of the development of general attitudes of mind.

The growth of a child's love for his mother will serve as an illustration. At first a child associates his mother with the satisfaction of natural desires—she feeds him, makes him comfortable, introduces change into his monotonous life. As time brings more varied needs, the child experiences different reactions—his mother occasionally thwarts him and he feels angry with her, but if, on the whole, he thinks of her as the dispenser of comfort and security, he slowly begins to associate her with happiness. This makes, as it were, the foundation of the sentiment and time adds to the structure. But more is needed if a strong sentiment of affection is to develop ; the child must not

remain a passive recipient, he must actively express his feeling. In the early months certain expressions of comfort are all that are possible, but as he grows his expressions of pleasure or anger are more lively and varied and, what is even more important, he begins to try to serve his mother ; he kisses her, shouts for joy at the sight of her, follows her and finds proud pleasure in doing her service. If he is not actively encouraged in giving as well as taking, serving as well as receiving, it is very doubtful if he can develop a strong feeling of affection. This need of activity and reciprocity in the growth of a strong sentiment is most important. Nor should the activity be confined to expression of emotions which may only induce a state of mental excitement that may check ordinary normal growth.

The 'experience' content of the sentiment should in all cases be as large and varied as possible: the child must associate his mother with his work and his play; he must know her as his friend and also as his critic; he must actively seek to please her and help her. But in the early days, absorbed as he ought to be in the brave new world in which he finds himself, most of the characteristics of his sentiment for her should be pleasure in her presence, pain if she is hurt, possibly jealousy of her other friends, but for the greater part a feeling of happy security in her reliability. As the child grows older, if the sentiment is well and strongly built on companionship in times of happiness and help in times of trouble, there should be a greater feeling of mutual friendship. But the child should be less dependent on his mother, for friends of his own generation and, it is to be hoped, his growing interest in art and science will claim his energy and emotion.

Nevertheless, though he may apparently live his own life, the sentiment is there, in some ways growing stronger every year, and should his mother be threatened with any trouble the boy's reactions will at once show how strong it is.

This statement seems to imply that no sentiment ever dies. It is doubtful if a strong sentiment built up on years of experience ever does; for when death seems to end such companionship as has been described here and the wound seems completely healed, occasional but intense outbursts of grief can occur years afterwards.

I am inclined to think when children grow away from their people and by the early thirties seem entirely indifferent—and, indeed, declare themselves to be actuated only by feelings of duty—some essential condition for the growth of the sentiment has been lacking; the child has been in nursery and school and shared very few experiences with his elders; he has been over-instructed and ordered and made to feel insignificant or even a nuisance; his expressions of friendliness have been checked.

The reader will find that a consideration of the other sentiments will show similar conditions are necessary for growth—time, opportunity, activity of suitable kinds.

The self-regarding sentiment seems to have a slightly different type of life history, but it will be considered in the next chapter in connexion with the growth of character.

THE TRAINING OF EMOTIONS AND SENTIMENTS

What Training Involves

If the above analysis of the working of the mind is correct, the drive for action is emotional in character—either some simple emotion causes a simple action or some sentiment is sufficiently strong to direct conduct, sometimes, indeed, to check selfish and substitute social behaviour.

Herein lies the importance of encouraging the right 'feeling tone', as well as thought, for it is the attitudes of mind that are held with some sincere emotional fervour that will give rise to effective conduct. Indeed, if one is

looking at the working of the mind from the point of view of its intellectual content, one stresses the importance of intellectual attitudes, but when considering the manifestation of such attitudes, one finds they are held with more or less emotional fervour and proportionately influence conduct.

If, then, 'the drive' for conduct comes from our emotional energy, it follows that great effort should be made by all educators to encourage the development of a strong sentiment of love towards worthy ends. How the development is to be achieved is to some extent a matter of opinion. If it is indeed true that 'we needs must love the highest when we see it', then the whole duty of the teacher is to train a child in intellectual and physical vision. And, indeed, most selfish or cruel actions seem to show lack of imagination rather than a direct love of self or pleasure in cruelty. In other words, ignorance is the cause of more evil than bad feeling.

Nevertheless, there are the people who see the right course, but are either too selfish or, more likely, too indifferent to take it. Life is so full of multitudinous things to do and daily routine is so binding that unless there is strong internal compulsion we jog along, more or less happily, and leave undone many things that we know we ought to do, justifying ourselves on the grounds that they are not our concern; indeed, we find any reason that will pacify our consciences.

Now in such cases we do not refrain because our sense of values, or, in other words, our intellectual judgement decides against action, but because we have not sufficient energy to overcome resistance. Many people would say, that it was 'will' that was weak and we must consider what that implies in the next chapter. But the reader will find that careful consideration will at least give him positive evidence that when he feels strongly he acts on his feelings.

How then can we ensure that the children we help to educate feel sufficiently strongly to act when action is necessary? There is a tendency with educators to over-estimate their power to train the new generation to think and feel as its elders think they should—especially in the universe of ethical conduct where sentiments and personal conviction play so strong a part. But there are certain conditions that seem to favour healthy social life and at least a teacher should consider them.

Just as a child by suggestion accepts the rightness or suitability of certain ideas long before he would acquire them were he entirely dependent on reasoning, so he gets his emotional attitude to these ideas through his sympathy with his community. Hence if he lives in a world in which people really 'feel' friendly to their neighbours and act on their feelings he, in all probability, will grow up not only assuming that people should help each other but also acting on the assumption.

But there must be a very close connexion between feeling a course of action desirable, judging it right and carrying it out. The fact that at a certain stage of development a child only judges an action right because the people whom he respects think thus should not obscure the importance of the threefold relationship.

In the early days while the child is going through the stage of 'crowd thought', at any rate the crowd thought should arise from the right emotional attitude and should find a social outlet. Thus for a teacher in one lesson to urge that one should love one's neighbour and return good for evil, in another to uphold the evil of punitive wars and in yet a third to urge his class to behave like men and fight it out seems to make an attitude of consistent friendliness impossible. Instances could be multiplied indefinitely: the mother who says all she cares for is that her children should be truthful and then punishes them in anger for the fault they confess; the teacher who blames a child

for showing off and then uses this capacity on some opportune occasion.

Moreover, even the people who think and feel consistently about life often miss opportunities of giving younger people suitable outlets and do not encourage practical expression of social feeling.

To help people to grow up with the right emotional attitude towards their community, their work, the world they live in and the beauties thereof seems to demand a threefold training: a widening of innate emotional reactions into larger and more varied channels and deeper and more highly organized emotional attitudes or sentiments; these in their turn will find satisfaction through action—far more complicated than the native reactions to simple emotions and only acquired through experience and practice; that the actions shall be suitable demands knowledge and intellectual training—again a matter of education. Such threefold but closely associated training must be a major problem throughout the educational life of the child, and how it is carried out varies so greatly from school to school, teacher to teacher and child to child that it is hard to generalize on it. Some light, however, is thrown on the difficult problem if one considers the needs of children and young people in three main periods of growth—early childhood, say to seven, when for the most part children are ego-centric; the period from seven to, say, fifteen when the crowd is the great influence in a child's life; the period of adolescence when the youth finds himself and eventually learns to live by his own code of ethics.

Training during Early Childhood

The early years of a child's life are perhaps the most important of all, for then he must, as it were, be fitted in happily to his environment. He must acquire the physical habits that make for health and to a great extent that is only another way of stating that his mental adjustments

to his world must be satisfactory. He must, for example, associate pleasure with social conduct—smiling and not snatching, eating the food he is given, and so on. As he grows stronger and more venturesome he must be encouraged to experiment in all possible ways, made self-reliant and kept fearless and from the first considered one of a community of helpers. It is as important that his friendliness is used, if the above analysis of the growth of a sentiment is correct, as that his curiosity is satisfied if we wish him to have intellectual interests later. Because at this period of life a child is naturally absorbed in his own occupations, his educators must be especially careful to encourage any manifestations of social feeling that are shown. This does not mean, of course, that unselfish conduct should be imposed on the child, for that only makes him realize his inability to rebel. But it implies encouragement and approval even though the child's help results in less well-done work than his elder would always wish.

Indeed, the training is nothing but a particular application of the theory that educators must as far as possible use their knowledge to encourage that aspect of development that will lead to most satisfactory adult life.

The intellectual training that is necessary, if the sentiments are eventually to have a strong and secure foundation, is gained most successfully when children up to the age of seven have full opportunity for working out their own interests by exploration and construction. But specific training should be given as the need is felt, and the wise educator loses no opportunity of helping the child to acquire those experiences that will make future life easier. Thus when thinking of the training that can be given to a child in social ethics a teacher would do her best to encourage an interest and understanding of other people's likes and dislikes and other people's views. Indeed, at this period of life friendliness, generosity and fearlessness should be the emotional characteristics of the well-educated child.

Training during Childhood

If it is true that a child from seven to fourteen or later is strongly influenced by the community of his equals, his teacher's work is very different from that of the teacher of younger children.

In the first case it seems to me that training must, whenever possible, be given in thinking for one's self, and hence the intellectual work of this period is enormously important. Above all things, the children in the primary schools should be encouraged to experiment, to organize their own work and justify their own opinions. Later much will be done to show them the importance and value of the work of great thinkers and artists; but now, when there is so great a natural tendency to accept other people's thinking, it is better that they should acquire, as far as possible, first-hand experience and only use authoritative work to help in their own studies.

This view of the right training of the child of primary school age is almost entirely opposed to the usual practice of the schools, for one constantly hears it asserted that after seven a child should settle down to 'serious work' and that implies memorizing a great many facts and acquiring much skill that his teacher thinks important, but that seems to him useless. His absorbing interests meanwhile are in secret societies, team games, and, if untrained, making life unpleasant for those who do not worship his gods.

In the free and good school the crowd feeling would be used but not abused; the teacher would be on the side of the child who did not, maybe, like games and school slang. He would as a crowd leader encourage discussion on such topics as the greater interest in a world where all do not think alike. He would encourage hobbies and friendly interest in other people's ways of life.

History and geography during this period are of great

value, for the study of other people and other types of life widens a child's horizon greatly. The value of art in arousing right feeling is equally, if not more, important, but that will be dealt with in a later section.

Slowly during these two periods of life a child has been laying the foundation of a sentiment of respect for bravery and his desire to be brave and his willingness to admire brave men should be used and developed. As a little child he was encouraged to be brave and that generally implied that he must bear the necessary ills of life with cheerfulness. But by his study of literature and history and by class discussion, an ideal of personal courage should have grown and, long before he leaves the primary school, he should have had an understanding of those little nameless 'un-heroic' acts that are all that most men can hope to achieve. Such understanding will help to make his feeling for bravery more active as he realizes that such conduct is within his scope. He will thus grow to respect the boy who thinks for himself and is willing to forgo the approval of the crowd. The solitary thinker, the champion of the unpopular cause, the man who sacrifices his pride to truth come into the category of brave men whom he can emulate.

I have tried to show how the sentiment of respect for bravery grows during this period and to suggest how school life can encourage it, both because it is one of the most characteristic attitudes of the growing boy, and because it shows clearly how indirect the training is and yet how directly practical. Such a training is gained by living in the right environment, reading and talking with vital people who care for these things. While in some schools every subject would add to a child's desire to be courageous, in other schools a child might get no idea that there was any connexion between what he learnt in school and his daily conduct.

What has been said of bravery can be easily applied to other aspects of a child's life—that to be kind is often more

important than to be victorious, that in what measure one wishes for freedom, in that measure should one give it, &c.

Training during Adolescence

During the first two periods of life sentiments grow slowly and in the dark as it were. At adolescence a boy suddenly finds himself a prey to strong feelings, many of which seem to him entirely new. Thus he does not associate his almost passionate love of bravery or truth with the less intense feelings of a few years ago that made him struggle to do the brave thing and speak the truth. Moreover, during the period when his community meant so much to him, he was often brave or truthful because it was expected of him, but now he realizes strong forces within himself that control his conduct. Unless at this period he is so fortunate as to live with sympathetic people, he will pit himself against his community and the characteristic words of early adolescence are often 'I can think for myself', 'I am surely allowed to have my own feelings'. But the very fact that a youth of about fifteen feels impelled to assert such truisms implies that he is entering that stage when law is self-imposed and no longer external.

The problem of the educator at this period is twofold; to make the transition from boyhood as easy as possible, and to ensure that the law by which the growing youth is self-governed is moral and social.

The transition from community-imposed law to self-imposed is most easy if from his earliest years a child has been given responsibility that has steadily increased with his growing powers of mind and body. Thus a child who has amused himself, looked after himself and younger children, who has been encouraged to think for himself and been left to suffer the consequences of his own mistakes, has gradually grown to regard himself as a responsible person and to understand how to control his actions.

Perhaps this is but another way of stating that it is much easier to grow in a free community where individualities are respected than in a society where obedience is the most important law of conduct.

As a child feels the growing powers of self, he should be given every opportunity of testing them, and if he has not been thwarted or over-organized he will be far more willing to discuss his plans and feelings and to stand honest criticism than the over-disciplined youth. The characteristics of the inner law depend to a large extent on the ideals of right conduct that the agent has acquired and adolescence is the period during which ideals are formulated. An ideal may be defined as an attitude of mind in which a strong sentiment of respect, or in some cases love, is directed to some intellectual conception. Thus if one says a man has high ideals of truth and charity, one implies that he feels so strongly on the beauty of these virtues that he will, at great personal cost if necessary, endeavour to live truthfully and charitably.

It at once becomes clear that the intellectual content, associated with such qualities as truth, charity, social duty, &c., is of great importance in determining conduct and that, perhaps, is why until adolescence we seldom experience these strong emotional attitudes towards abstract ideas. It is equally clear that if educators to the best of their intellectual and moral ability help their pupils to acquire right ideals, they will have gone a long way towards making the code of self-imposed laws good.

The method of imparting the principle that underlies the good life is most important. An intellectual pupil, interested in thinking out problems for himself and also in finding what the great thinkers in the world have thought about life, might be spurred to ethical conduct by a course on the history of ethics ; but the gap between theory and practical application would in all probability be too wide. Even the ideas that the average pupil derives from religious

literature or history do not, as a rule, directly modify his conduct.

Nevertheless the older generation, including teachers, must hand on their own ideal of goodness, not formally but as so vital a part of their philosophy of action, that to ensure peace of mind it must be satisfied just as hunger must be appeased to ensure peace of body. The younger generation is quick to judge and to feel sincerity and if we preach the joy of intellectual life but spend our spare time in trivial pursuits, urge on them the beauty of unselfishness but consider of first importance our own interests, then they will go to the extreme of thinking it is with us but a matter of conventional talk and will probably fail to appreciate our very mediocre attempt at righteousness. They will make their own standards of conduct, revolt from our codes and learn only by experience—a hard and bitter school.

I do not want to suggest that lessons with ethical significance, be they religious, philosophical or results of discussions on historical persons and their motives, are valueless: on the contrary, as was stated previously, the importance of the intellectual side of our ideals of conduct can hardly be overrated; but it does seem that the active living belief in ethical conduct—active and living in the sense that we live by the faith that is in us—is equally if not more, necessary. Hence at this difficult period of adolescence what a boy needs almost more than anything is a good friend in his teacher—a friend who will encourage him to gain those interests that will ‘last’ all his life, who will help him to live up to his standards of conduct and gradually improve them.

Nor must good conduct appear to the growing youth to be a gloomy affair or too difficult of attainment for him to aim at it. After all, the artist we admire is he who seems to get his results with ease and to have great sources of reserve power. Similarly, those who want to encourage others to practise the art of good conduct should inspire

in them a feeling that it brings great joy and satisfaction and that, though it is never easy, it becomes easier with practice. It seems unintelligent to expect younger people to struggle to acquire standards of conduct that bring no pleasure to those whom they see practising them.

It was suggested that the characteristic sentiment of the young child was bravery and McDougall would explain the growing fervent adherence of the adolescent to his ideals as a manifestation of his self-regarding sentiment.

This sentiment also has its foundations deep in the experiences of early childhood and we see its first manifestations in the rebellion of the over-disciplined child, the resentment of another at being a cause of laughter, and so on. Here are the first manifestations of a respect for the self that at the time of adolescence is now consciously realized and that makes it almost impossible to fall below the standards of that inner self with whom one lives in solitude.

What worthy conduct will be, depends entirely on our ideals. I suppose the cat burglar loses his self-respect when he bungles an easy drainpipe and feels he has fallen from grace when he is caught by the police. Many of us seem to suffer far more shame for a slip in social conduct than for the uncharitable remark we made quite unnecessarily. Such standards of conduct throw a light on social training. The cat burglar for some reason has grown up with false ideas of permissible methods of earning a living—his ingenuity and bravery could, and should in a civilized state, have had different outlets. But the man who suffers almost agonies of remorse because he spilt some soup on his host's dining-table lives still in the pre-adolescent stage of morality: goodness for him is what his community approves, and his rewards and punishments—why, alas! is it so often punishments?—depend on what others think of him and not on self-judgement.

That approval from those we respect and love is one of

the most real joys of life is patent, but it should not take the place of the compulsion of the inner law. When it does, it seems to me that the society, in which the man lived as an adolescent when his character was forming, must bear much of the blame and certainly his teachers cannot go scatheless. If at an impressionable time of life over-stress is laid on results and poor speech, clumsiness, poor scholarship, bad manners are taboo, while intellectual distinctions, charm of manners are open sesame to praise and approval, the boy takes these qualities as the proofs of a successful life. Not many of us, and certainly not the writer, is able to declare dogmatically what successful life is ; but undoubtedly to live at peace with one's conscience is a necessary condition and, to a great extent, it lies with educators to see that what conscience demands of us will make us honourable, trustworthy members of our society with enough interests to make life a pageant and not a dull show, and enough love for our fellow men to make us rejoice in their successes, further their interests, mourn for the less fortunate and work wholeheartedly for their greater happiness.

The reader will see that the problem of moral training is closely connected with that of the growth of sentiments and intellectual development. At times it appears as though to feel rightly about the good life were the more important, at others as if we should all pray with Meredith for

More brain, O Lord, more brain ! or we shall mar
Utterly this fair garden we might win.

To some people to feel a thing is right is sufficient, but for others the intellectual judgement that the course of action called good is necessary, is essential. The intellectual training that results in reasoned acceptance of right standards is especially important for the more fearless people, who think for themselves and will not be hampered

by a conventional code of ethics. The majority of men tend to keep along the beaten track of generally approved conduct, either because they fear public opinion, or have no feeling of life as an adventure, or experience no temptation to wander. But for the adventuresome, the passionate experimenters and seekers after new experiences, reasoned convictions about the rights of others, and the need to refrain from desired experience at the cost of suffering to their community, are fundamental. For such people no opportunity should be lost of enlarging their understanding of the ramifications of action and, by free discussion as well as by careful study of the humanities, of giving them knowledge of what man has made and might make of man.

TRAINING IN APPRECIATION

One of the characteristics of the modern school is that much consideration and time is given to methods of arousing in all pupils a love of art in one of its forms ; less and less is it assumed that music, painting, handicraft are all very well for the lower school but, once the serious acquisition of knowledge becomes necessary, such fancy subjects must be dropped. This change of attitude is to a great extent due to two causes.

In the first place, the psychologists have brought home to us that the 'drive' to conduct comes from innate tendencies or acquired emotional reactions, and hence the importance of the emotions has been greatly enhanced.

In the second place, experience of the results of education has shown conclusively that for many people a school life spent in the acquisition of 'learning' often leaves a distaste for intellectual pursuits. When this is the case, the ex-scholar may be at a real loss for congenial pursuits, apart from his daily work and his daily golf, unless he is fortunate enough to have acquired outside school an interest in painting or music or some other form of art.

Those of us who would find the world a frightening place were it not for our intellectual preoccupations, necessarily deplore the fact that so many people do not share our joys, and all keen teachers are busy forming here and there little bands of people who pursue learning after the pressure of examinations is removed. But even such people are missing many of the most satisfying experiences of life if they have no artistic training, and many who failed to find joy in books would find unlimited and lasting satisfaction in the practice of some form of art.

It was of these people that Dr. Dyson was thinking when he urged teachers to break away from the traditional curriculum and to introduce such subjects as would give the learners in years to come occupation for their leisure. Thus, for example, the boys and girls who leave the senior schools are not often the type that would haunt the public libraries for further information on history; but many of them would gleefully join a class for sketching, singing or dramatic work and more still would do so had they acquired a love of some such subject at school.

Hence all teachers who wish children to leave school with a sentiment of love for their subject must ponder on the conditions that psychologists have found are favourable for growth, or, in other words, apply their knowledge of the psychology of sentiments to the particular case in point.

Whether we want to encourage a great love of literature, history or art, the actual conditions are much the same; but the history teacher can justify the inclusion of his subject even if the pupils do not continue it after they leave school. He will maintain that he took account of the pupils' environment, the time they had for study, the sort of future in store for them and gave them such knowledge of the past as is essential for every citizen in a modern state. Thus do mathematicians, historians, geographers, &c., &c., equip their pupils for future life.

But in the case of literature, music, all forms of pictorial art, there is no such justification for the hours that have been given at school. If such subjects were taught in such a way that the pupil did not wish to continue their training, we cannot easily justify their place in an overcrowded curriculum. The plea that the children enjoyed such occupations does not carry much weight, for they would probably have enjoyed a cinema more. Nor does 'enjoyment' mean very much if it does not urge one to seek for similar experience.

Hence, whereas in subjects that have a definite 'utility' value a great deal of stress is laid on the intellectual aspect of the art of learning, in subjects which have an aesthetic value the stress is on methods of training 'appreciation' or the sentiment of love for some definite form or forms of beauty. It follows that to teachers of literature, music, painting or any form of art, the study of the conditions of the growth of sentiments is most important and the 'special method' of their craft is mainly based on the application of psychology to their own problems.

Hence in a sense the following general conditions that should be observed when our aim is to give joy rather than information make a brief summary of emotional education.

(1) Pleasure tends to encourage repetition of an experience, to rouse thought and an active search for similar experience. We discuss the books in which we are interested, not those in which authorities think we ought to be interested, and we are eager to read more of the same type.

(2) The emotional reaction of pleasure is in many cases spontaneous—a reaction of our temperament or intimate inner self to some congenial experience. We should be hard put to it to say why one sonata moves us to the depths and another, that critics tell us is equally well made, leaves us mildly interested. Such personal idiosyncrasies are equally at the root of friendships both with people and

works of art and though more experienced people can point out to us beauties that we are overlooking, they defeat their ends by trying to insist on acquiescence. To be 'made' to express admiration is, for many, equivalent to being made to rebel. The story of the ostracism of Aristides is a case in point.

(3) With most people, certainly with most children, a great deal of emotional experience and consequent activity precedes intellectual criticism. Thus a child loves rhythm and likes the lessons in which he practises it, be they eurhythmics or poetry-making. Intellectual criticism on his results comes later, and criticism on the works of masters in the art later still. Many teachers of literature defeat their own ends by insisting not only on unsound psychological reasons as to why a poem is liked but also on criticism of the author's method—criticism often cribbed from some book.

(4) Perhaps all such faults in teaching would be avoided if it could be remembered that time is a great ally and there is no need to hurry appreciation, much less the expression thereof. Just as it is better for a child to love his mother for some such selfish but natural reason as that she gives him treats than to respect her because she is 'so good', so it is better to laugh at Malvolio because he looks 'funny' than to learn unwillingly the speeches that show his self-love. If for any reason the reader has enjoyed *Twelfth Night* so much that he will read or act it voluntarily again, appreciation will grow.

(5) We all learn far more by doing than by seeing the results of others' actions. To make the poorest picture, the most halting tune or poem, the flattest story is, if willingly undertaken, an exhilarating experience; it spurs us not only to further effort, but also sends us in a very different attitude to the study of how others have achieved success.

But many people are horribly depressed by criticism and

if a teacher, with all the force of prestige suggestion behind him, is unduly critical of his pupil's efforts he will defeat his own end. Especially are adolescents—more aware of the criteria of good work and more conscious of self—afraid of criticism. Hence the importance of early creative work and its continuance throughout the junior school.

(6) Love grows by what it feeds on, and although it is simply useless to give children artistic experience for which they are not ready, nevertheless it is essential that from earliest childhood they hear good poetry, lovely tunes, use good paints and pastels and see good pictures. Especially in pictorial art and music are children often starved of experiences of good work.

(7) Finally, the more wide our background of knowledge, the more chances we have of varied experiences, the more likely we are to find those works that will be a lasting joy to us.

Teachers often act as though good literature, music or painting had no chance if pupils were allowed to know the joys of 'trashy stuff'. The fear seems groundless. Most of us have read a reasonable amount of trash in our time, poor music is often thrust on us; but if we have been fortunate enough to have had older or more experienced friends who see to it that we are encouraged to consider better types of each art, the good stands out from the background of poor and mediocre.

If teachers can bring themselves to appreciate what it is in trashy art that attracts their pupils, they can often find ways of giving the same pleasure in a different and better form.

CHAPTER XII

CHARACTER, WILL, AND CONATION

THE ACT OF WILL

IN previous sections an attempt has been made to show how the child grows in emotional and mental stature ; how on his early innate tendencies are built his attitudes to life, sometimes so strongly held that they are characterized by their emotional tendency, sometimes so closely packed with intellectual experience that they are marked as the product of thought.

But in both cases the test of the strength of the stimulus and the efficacy of training is that the whole mind is working. If we can predicate some such entity as psychic energy, we could say that in the case of the working of a strong sentiment our energy is flowing in emotional, when we are solving a problem in intellectual, channels. All metaphors, however, are more or less misleading and the reader will do well to train himself to think of his mind functioning at times emotionally, when all intellectual experience will be used to further the desired end, at times intellectually when emotion is dormant and his capacity for thought is active.

So far, however, though there has been constant insistence on the necessity of action, we have dealt with emotional experience as the drive to action and with thought as the necessary guide to suitable means. We still have to consider the problems of the mind in action and the training of the will, always to the fore when the wise are exhorting the unwise waverers. The reader will,

however, recall that the necessity of utilizing the emotional drive and directing it intellectually to the right type of action has been stressed, and also the fact that certainly the majority of children learn by doing and not by intellectual processes divorced from action. Thus the normal course of mental life may be described as the satisfaction of some desire, more or less strongly felt, by action that will be successful or unsuccessful according to the intelligence and experience of the agent.

It is at that psychic moment when thought is transmitted into action that we have the most characteristic experience of 'will' as it is so often termed. In the broadest sense when action can be described as a striving to accomplish a desire the term 'conation' is sometimes used; when however the whole personality is expressed in action the term will or volition is generally used.

What actually do we mean when we say a man's will is strong or weak? And in how far does the ordinary man's view differ from that of the psychologist?

If the reader will consider his own use of the terms strong and weak will, I think he will find that he calls the man strong who is tenacious of purpose—who sees what he wants to do and does it. If such a man also has high ideals and good well-trained intelligence, so that he chooses rightly the means by which to carry out his purpose, we should probably call him a man of fine character.

Now when we say a man is weak-willed we imply that he cannot be relied upon to carry out his purpose. We make no reflection whatsoever on his intelligence, for he may be an extremely able thinker and well trained, but for some reason or other he lacks that 'drive' that enables more fortunate people to see a situation through to its possibly weary end. When it is remembered that the drive to action has been shown to be either a primary emotion or sentiment, it will be seen how close is the connexion between what is commonly called a strong will

and emotional capacity. The connexion is not always so clear or simple as this statement implies and as a more careful consideration of strong-willed and weak-willed people will show. The 'balanced' man may not be strongly emotional and the very use of the word balanced to describe him implies that he will weigh the possibilities of action before undertaking any given course; yet once he has begun he will continue and only modify his action and alter his original plan as time and experience give him greater understanding of the problem.

Such a man well might be said to be the servant of both emotion and intellect, and the amount of emotional energy will be less than that required by a less intellectual person. Indeed, to go back for a moment to the hypothesis of psychic energy, in a case like this the force for action is found from the combined drive of emotion and thought; though McDougall would call emotional power the driving force, yet intellectual approval on the value of the action is so necessary to this type of character that for the layman it looks as though it was equally important.

The case of the obstinate man is also enlightening. We generally say of him, 'Once he has an idea in his head it's hopeless to get him to change.' Probably his self-regarding sentiment has for part of its content the idea of himself as a man of 'inflexible will' and he prides himself on not deviating from a fixed course. Very often such people are merely stupid and this obstinacy is, as it were, a protection against themselves as well as others. They don't want to confess to themselves that it takes them a long time to see the right means to a given end or that their minds are such as foresee consequences with difficulty; and so they blunder on and get self-satisfaction from asserting what they have said they have said, what they have planned they will carry out.

If it comes to the attempt to educate such people, a very different course would be required from that arranged

for the impulsive people—the description usually given to those who pledge themselves in moments of high feeling to a certain line of conduct, but have no staying power. Most of us are more or less impulsive in this sense. If the plan we propose could be carried out at once and with only sufficient obstacles as would stimulate effort, we should all build Jerusalem in England's green and pleasant land. But what actually happens is that for some reason we are deeply stirred emotionally and feel that we cannot rest till we have acted—really in some such way as will dissipate our emotional energy.

Unless, however, the cause of our disturbance inflicts hurt on an extremely strong and well-organized sentiment, the demands of self are satisfied more quickly than the task that we undertook is accomplished. Hence by helping a housing scheme, we feel we are doing something and relapse into acceptance of slums in this England. Yet it would be a mistake to say that all of us who have been guilty of such conduct, and most of us have, were not moved deeply at the time we sang Blake's poem. Psychologically though the effort of an emotion outlives the actual experience, it does not live long enough to accomplish any important project. Here training must come in, and one of the most difficult tasks of the educator is to ensure that tasks willed in hours of insight are performed—and preferably not in gloom. It is for this reason that a great many people to this day urge that the only safe road to a good life is obedience to the call of duty, disagreeable though it may be. Such people always disparage the power of emotion to promote and continue any action that is not directly self-satisfying.

Before turning to the psychologists for aid, we can get further light on the problem by considering what actually Matthew Arnold meant when he wrote :

Deeds in hours of insight willed,
Are oft in hours of gloom fulfilled,

Insight, vision, inspiration, all have in common that they are used to describe an emotional state when a clearer, brighter, finer light is thrown on our everyday problems and we 'feel' we understand better what we ought to do. At this higher emotional tension we forget our love of ease, comfort, approbation, or our fear of danger, criticism or whatever may be our inhibiting forces, and decide that for the future we will live more in accordance with our vision of what life should and might be. At that moment, it seems to me, we experience the characteristic act of willing. All our energy is in the decision and our forces are set for action. The actions that follow are often not nearly so active and certainly not so 'willed' as at that moment of tense purpose. Consideration of the act of will at such a moment shows how very different it is from the type of response which we experience when we turn away from a light, run to answer the telephone bell, &c.

The effort at 'decision', or the act of will that ensures the hundred and one strivings that follow, is not always accomplished at a moment of high emotional tension. To some people it is almost a daily act of will to get out of bed. Yet if the reader is one of those people and he can recall what actually does induce him to get up, he will find that either, as he grows more awake, some thing which he must do arouses his interest and almost unconsciously he gets out of bed; or experience tells him the last moment he can rise if he is to conform to his standard of dressing and punctuality. In the latter case he will often decide that when he has counted thirty he must get up; if he 'felt' the must, he will then accomplish the act. What if he does not? In that case his standards are lower than he hoped; he will dress more carelessly, catch the next bus or scramble his breakfast. In the first case feeling has, as usual, been a spur to action; in the second his standards or ideals of daily conduct seem to be the predominating

factor, but on closer consideration the reader will, I think, find that a fear of the consequences of infringing them, or dislike at the thought of a breakfastless scramble is certainly active.

Thus far this account of action has only differed from that given by any interested observer of man, if it has differed at all, in that great stress has been laid on the emotional origin of that persistence which carries out action, and 'will' has not been treated as a separate 'entity'.

We must go to psychology for further light on the meaning and characteristics of will. To ensure consideration of mind as an entity manifesting itself in various ways, it is helpful to consider the psychology of will as the manifestation of character. But only if the reader will constantly reconsider the various types of difficulty experienced by the people he knows, including himself, when they are faced with transmuting feeling and thought into consistent conduct, can he collect the necessary experience to interpret psychologic theory in terms of daily practice.

THE MEANING OF CHARACTER

Certain words are constantly being used to describe man as he appears to his fellows and hence they are almost entirely concerned with visible behaviour. But it is important for the purpose in hand to realize the exact field of behaviour that is covered by each word. Thus it is better to use temperament only to describe the results of those chemical or metabolic changes dealt with in Chapter I, and to find some more fitting word with which to replace it in the phrase 'artistic temperament'.

Disposition also must be used carefully, for in ordinary parlance we often confuse it with temperament and character. McDougall uses it to describe the sum total of a man's native propensities and points out that as a rule we

characterize a man's disposition by signalling out his most marked innate tendency.¹ Thus we can say a man is of sociable or timid disposition, but we should not say he was of honourable disposition, for this quality implies acquired as well as innate tendencies.

When, however, we speak of a man's temper we are considering directly neither his temperament nor his disposition, but the way these characteristics compel him to act. Thus we ask if he is steady-going or fickle, hopeful or despondent, and the description that is given of his temper will throw light on his probable conduct.

The term character has a wider meaning, for it connotes not only his innate make-up—his temperament, his disposition, his temper, but also what he has made of them. Character is acquired and is a structural growth. Clearly the native propensities are the raw material out of which character is organized and clearly schools or no schools the organization would take place. But if a man's actions were no more predictable than a young child's, if he was entirely at the mercy of his strong native propensities, fear, sex, hunger, &c., we should not call him a man of character.

At once we see that what differentiates the man of good from him of bad character is his standards or ideals of conduct. Hence, when we are discussing a man's character we are thinking of his power of controlling his conduct and willingly, or in mature people habitually, shaping it in accordance with definite ideals or standards of behaviour — 'that in a man which gives, or rather is the ground of consistency, firmness, self-control, power of self-direction or autonomy'.²

No better description of the value of the work of character can be given than that by McDougall in *The Energies of Men* :

¹ *The Energies of Men.*

² *The Energies of Men*, p. 186.

'It gives stability, consistency, harmony, predictability to conduct ; it is that in a man which makes him trustworthy, dependable, keeps him steadily set towards his major goods in work and play, gives him strength of will and purpose, renders him capable of making the hard choice in difficult situations and of abiding by his decisions.'¹

Now out of each man's innate and acquired characteristics, out of his experiences, modified as they are by his physical and mental make-up, he evolves an entity which he recognizes as 'myself' and we call his personality. Character is a man's personality in action.

THE GROWTH OF CHARACTER

Like personality character is a growth and this fact is generally accepted by us all. We talk of a good little boy but a man of fine character, a child of happy disposition but a man of attractive personality.

We have, indeed, during the preceding sections been discussing the growth of a man's personality—how he takes control of his innate tendencies, how his simple emotional reactions are organized into strong sentiments, how his perceptions are heightened and modified by his thought and knowledge. That we now turn to discussing the growth of character rather than personality is because we are directly concerned with the problem of will and it is obvious that in considering personality in action we are gaining much light on the training of will.

The development of character demands time and opportunity and *mutatis mutandis* the conditions of growth of character are similar to those of sentiments and ideals. The raw material is again the native propensities, temperament and disposition ; based on this material is the organized pattern of the child's conduct. Such organization may be considered in two stages, though it must

¹ *The Energies of Men*, p. 186.

never be assumed that one stage has to be completed before the other begins.

The first stage is the formation of sentiments. A man cannot be said to have character unless he has definite emotional attitudes to people, to his community, to his work, &c., which urge him to act in predictable ways. Indeed, McDougall defines sentiments as 'fixed conative trends'.

But a second stage is necessary—such organization of these sentiments as will ensure a sense of their relative importance. Thus and thus only can we ensure the possibility of harmonious and consistent working. If, for example, a man has a passionate love of truth and an equal passion for his friend, he must have some system of values if he is faced with the necessity of telling a lie to save his friend from disgrace. Again and again life brings the necessity of choice not between right and wrong but between right and right. If a man has strong sentiments but they are unorganized, at one time one will drive him to action, at another, another, and his conduct will be unpredictable because he is lacking in character. It is in the organization of the sentiments into a consistent whole that intellect, the other aspect of the mind's organization, plays such a great part.

The formation of sentiments proceeds *pari passu* with this organization and in the estimation of values there is urgent need of help—directly acquired through experience and indirectly by suggestion from one's community. If from fourteen to eighteen for six days out of every seven a lad is allowed to see those he respects assume that wealth, honours, great possessions are of supreme value, it will take a re-education that may be wellnigh tragic in its experience if he is to reorganize his sentiments on an entirely different standard of values.

Sentiments and tastes do undoubtedly give consistency to conduct—we look for A where we find his friend B, we

expect to see C at Queen's Hall and are surprised if we see D. But more is demanded of character and that is supplied by organization which 'integrates sentiments and taste into one system'. To ensure this integration of character, this absence of conflict and confusion of motives, the co-operation of the intellect is necessary, for by thought alone can a sense of moral values and moral sentiments be acquired.

Both intellect and character develop slowly and they mutually influence each other. Though one can at times 'feel' a course of action must be chosen, the safest guide is, surely, the careful consideration of a well-trained mind. Feeling, for example, would always tend to make one protect a friend or come to the rescue of a younger person. But if one thinks carefully on the results of action, the necessity for even one's friend's learning from experience becomes apparent. One might still decide that this was a case when help would be more educational than experience, but the careful thought subsequent to the decision influences the energy with which we help, especially when the first emotional drive has exhausted itself.

Equally a love of truth and honesty will be a constant force in the actions of all honourable people, but the educated man, trained to see several aspects of a problem, will not be easily inclined to think that he possesses a monopoly of truth. He will assert his belief fearlessly when he judges it wise and necessary, but he will not be found in that class of people who think the more disagreeable a truth is, the more it is their duty to publish it.

The slowly growing character with the habitudes it develops influences equally intellectual growth. The child who has worked hard and steadily at the solution of his own problems in the lower and middle school and who has realized the need of patience and accuracy, undertakes the purposive work of the upper school, be it to qualify for university life or for a post in the Civil Service, in a very

different spirit from the child who has worked because of the steady supervision and compulsion of his teachers. When the 'ordered' child leaves the middle school and reaches the age when he must take responsibility for his own work, he feels the joy of greater freedom and relaxed effort and his work often suffers. One constantly hears cases of children who have done admirably in a primary or preparatory school and who have 'fallen off' once their scholarships are obtained. The tendency is for the teachers of the younger children to blame the method used in the upper schools, and sometimes they do so rightly. But in many cases it is the character training of the lower school that is at fault.

That character and intellect are relatively independent is also clear, for it is possible to possess an excellent character and mediocre intelligence. When a man is described thus, I take it that his critics mean that he lives up to his standards of behaviour and that his standards are good, i.e. that his conduct is social and not selfish. But it would be better to use good instead of excellent in this case, for surely to be a man of excellent character should imply that he practises the art of life so well that it is difficult to think of a better performance. One would not call a pianist excellent if his technique were faultless but his interpretation wooden. The art of life is far more difficult and it will take the best training of the best material to achieve consistently excellent results. Most of us must be philosophical over our own limitations, and those of our friends, and be content with an averagely good record.

THE FUNCTION OF THE SELF-REGARDING SENTIMENT

Great as the influence of intellect may be, and ought to be, in a world of intelligent people, McDougall declares that moral sentiment would never have the force to overcome such strong innate urges as self-assertion, sex, self-

protection, were it not for the steady growth of the self-regarding sentiment. Self-assertion and a sense of ownership may be at its roots, but from early childhood, given the right environment, one can find in its embryonic manifestations much that is lovely. The child from, what seems to his teacher, a most wretched and unworthy home is full of interest and pride in the doings of his father, his mother, his baby and his cat. Thus the love of self involves the self's possessions. Even when a child finds his mother does not treat him as other mothers do their children, he still protects her from criticism and will, indeed, lie gallantly about her virtues.

If a man has been unfortunate in his educators and environment his self-regard may remain almost entirely attached to his own people and possessions. He may even then carry out many seemingly social acts in order to behave as he thinks fitting to his position. He will give his mother a home suitable to such a son, endow hospitals and be a kindly, indulgent and lavish father. But if his self-regarding sentiment grows no more than this, we have another example of how woeful may be the results of lack of education in moral values. This man loves himself because he has wrested from his community a fortune, perhaps made against great odds, and has shown that admirable quality, tenacity of purpose. He would, indeed, be thoroughly dissatisfied had he spent money unwisely or in some way reaped the disapproval of men of his type; and he would feel proud at praise, however indiscriminating. That men do exist with such an attitude towards themselves is the worst criticism on our type of civilization and the education we offer.

That man is fortunate who throughout childhood and youth has lived in an atmosphere of helpfulness, consideration for others and delight in intellectual and imaginative work. He too will be prevented by his standard of what his personality should be from certain actions and urged

tracted and he can 'feel' himself 'dither' as to what he shall do first. This is a simple case of conflict, well known to most people, but they are, in an unorganized personality, far more difficult and serious; in children and animals we can see fear and curiosity conflicting as causes of action, and can watch them striving to satisfy first one and then the other urge. Eventually one must conquer and the child either runs to his mother or goes to see what is in the stranger's bag.

(5) And this fact brings us to the most characteristic quality of conation—we strive whole-mindedly for one object at a time. This absorbed effort is sometimes described as the power of concentration, sometimes as a capacity for attention. We may, during the period of indecision, attend or concentrate first on one goal and then on another, but once the act of will has been made we attend to one goal only. Concentration on the goal seems to have the effect of a bright searchlight throwing up the details of the whole journey, for the more eager we are to succeed the more easily do we recognize details that will be helpful, stages in the journey that can be shortened, experience from our past that can be used. It is because concentration on the goal brings with it such stores of energy and calls up such stores of useful experience that, if it is possible to train this undivided attention, every effort should be made to do so. Indeed, one of the tests of sound education is that it promotes such concentrated effort. Hence the necessity of a careful consideration of the methods by which the will can be trained.

CHAPTER XIII

THE TRAINING OF THE WILL

PERSEVERATION AND PERSEVERANCE

IT was pointed out in the previous chapter that persistence or perseveration is a characteristic of conation. It is declared by psychologists to be innate and it certainly varies from individual to individual. Thus of two people who go to the same opera one may be almost distracted afterwards by the persistence of the tunes from which he cannot free himself, while the other cannot recall a single one.¹ This persistence does not seem to have any connexion with general intelligence and most psychologists now think it should be accounted as a factor in temperament.

On the analogy of innate sympathy as the basis of sympathetic imagination, one would be justified in assuming a connexion between a man's innate perseveration and his perseverance, or in other words, the persistent influence of his will on his conduct. Further experiments may bring to light some missed connexion, but so far none has been found and Webb, in his investigation on Character, states that from his results there appears to be a general factor ('W') 'that markedly dominates all the correlations yielded by the estimate of moral qualities, the deeper social virtues, perseverance, persistence; its nature is best conceived in the light of our present evidence to be in some close relation to "persistence of motives" that is to

¹ I once heard a man say he could not go again to *The Beggar's Opera* because of the way the tunes haunted him!

depend upon the consistency of action resulting from deliberate volition, that is from will.'¹

The results of Webb's researches are so important to all educators because he makes a strong case for the possibility of volitional habits that can be acquired by acts of will, no matter whether a man's native perseverance is strong or weak. Once a volitional habit is formed, it will act automatically as bodily habits do and probably the psychology of habit is much the same whether the aim be perfect violin playing or automatic response to a moral stimulus. Aveling says of volitional habit that 'it is stirred into activity by an appropriate percept or image; it is strengthened by exercise; it is quantitatively variable in different individuals; it becomes part of their "second nature."'²

Herein lies the hope of moral training for those who desire it. A man, for example, realizes that a hasty temper—a temperamental quality—is spoiling his work. He trains himself to inhibit angry words, to check impatient actions, and eventually the new attitude will work as automatically as his habits of dressing. It is true that 'human nature will out' at such times when volitional control is weakened—at times of great mental strain or bodily weariness—but that it is possible for a hasty-tempered and excitable child to become an even-tempered serene man is one of the facts of life that makes education infinitely worth while.

METHODS OF TRAINING

Formal Training

James, writing on the Laws of Habit in 1899, urged the importance of training the will. He pointed out that 'it is not in the moment of their forming but in the moment

¹ Webb's *Character and Intelligence* (quoted from Rusk's *Experimental Education*, p. 154).

² *Personality and Will*, p. 162.

of their producing motor effects that resolves and aspirations communicate the new "set" to the brain'. In other words, the act of will must be carried out by a series of suitable actions. But he goes further than this statement and urges definite formal training in a passage that is now classical:

Keep the faculty of effort alive in you by a little gratuitous exercise every day. That is be systematically heroic in little unnecessary points, do every day or two something for no other reason than its difficulty, so that, when the hour of dire need draws nigh, it may find you not unnerved and untrained to stand the test. Asceticism of this sort is like the insurance which a man pays on his house and goods—if fire does come his having paid the tax will be his salvation from ruin. So with the man who has daily inured himself to habits of concentrated attention, energetic volition and self-denial in unnecessary things. He will stand like a tower when everything rocks around him and his softer fellow-mortals are winnowed like chaff in the blast.¹

Thus James seems to imply that by daily acts of bravery, self-denial, &c., we can make volitional habits that will be transferable to situations in which other stimuli must rouse volitional habit to function.

It still remains to be proved, however, that the daily acts of self-denial carried out, presumably to satisfy some ideal of self-abnegation, would function effectively at a great moment of life when a man might have to deny himself pride of place and refuse office at the dictates of another ideal.

There are at the present day psychologists who advocate formal training of the will because of the results of experiments showing the success of formal training in intellectual work. But there is more evidence against the value of formal intellectual training than for it. It is, it seems to me, reactionary to return to such a training as would be, for the pupil, unmotivated. Not one child in ten would see the reason for training will as will, and to do a piece of work again just for the sake of doing it better would not

¹ *Talks to Teachers*. Psychologists nowadays would shy at the word 'faculty', though James was no believer in faculty psychology.

unwavering effort is an active belief in the satisfaction of well-done work. Now this attitude can only be acquired by experience—just as the idea of goodness can only be acquired through knowledge of particular good acts. Hence throughout the formative years of life a child and youth should be in such situations that will prove the necessity of effort.

Critics who believe in training the will by formal discipline sometimes say that in a modern school life is made too easy for a child. If it is, it is a bad school. The child who wants to build an engine should have numerous difficulties to overcome, and the fond mother who buys one for him because she sees him struggling to overcome them is fond in two senses. Her function is to know him so well that she can gauge with exactness the moment at which he must have encouragement, and perhaps help to ensure that he fulfils his purpose—a far more difficult and infinitely more friendly task than buying him an engine.

In the same way, when children are carrying out their own purposes, be they individual or social, there are numerous possibilities of training in effort.

In nearly all cases the effort for improvement will be increased if two factors are supplied, knowledge of good standards and motive for improvement. The workers must be brought into contact with more expert workers in their own field. Thus in workshops and factories motion pictures are used to show how the skilled man works, and in the schoolroom the teacher or some expert should set the standard, just as the elder players set it on the playing field. The cashiers in the school community shop will work to achieve faster and more accurate addition when they have been to a real shop and seen how real cashiers work. And if in addition a sale can be advertised and all the school come to buy, the desire to deal with money accurately and quickly will result in such strenuous and

concentrated effort that only those who have observed it will realize the consequent improvement.

The difference in such educative play from the formal teaching is that in formal teaching the teacher's motive was to improve the pupil's speed and accuracy in calculation; in proportion to the strength of her motive and the strenuousness of her effort was her success. The happy teacher was she who could enlist the sympathy of her class, suggest her motive was theirs and had many ingenious devices to make the lesson interesting to children. In the end as often as not the standard lowered with change of teacher, for the motive disappeared. Nor did the arithmetical skill remain, and for all the earnest teaching often little was to be shown shortly after a child left school.

It still remains to be seen what the children of to-day are like twenty years hence, but at any rate if we can encourage them to work out their own plans as fully and as well as they can, they will at least lay the foundation of good volitional habits.

It seems, then, that the necessary conditions for a high standard of effort persistently continued, until the desired degree of perfection is attained, are motive, knowledge of what standards are attainable by the expert, and what with intelligent practice by the learner. If this conclusion is correct we are back again at the conditions for the acquisition of any form of skill. When the teacher of drawing shows the work of great painters and by encouragement and helpful criticism urges the very youthful amateur to try again and make even greater effort at perfection, he is training the will of his pupil. This is as one would expect if the hypothesis is accepted that mind grows structurally with all its parts interrelated and all its store of energy and experience at the call of whatever mental activity needs it. In other words, good teaching and intelligent learning have direct and indirect results, both equally valuable.

In so far as a boy has striven with all his might to see through the difficulties of a problem and has worked tenaciously until he has overcome them, to that degree he can tackle his next difficulty more easily. The badly educated is he who has had so much done for him, sometimes by earnest teachers who give more help than they should, that he has never learnt to teach himself or to see himself through a difficult situation.

Lack of Concentration

(1) To force attention, in other words, to concentrate on an object in which one is uninterested is only possible for a very short period, and if a dominant interest is claiming attention it is almost impossible. Fear of a teacher's anger may keep a child working at a distasteful subject for a time, but he will not work with the absorbed effort of the boy who wishes to learn.

Thus to a very great extent the training in concentration is the problem of giving people strong interests in achieving certain results and consequently a matter of general education rather than of training the will. Granted that we are sufficiently interested in our task, concentrated effort follows.

Nevertheless, the volitional habit of giving undivided attention to the subject in hand can and should be encouraged, and the methods by which a child is taught can undoubtedly help or hinder its formation.

In the first place, class-teaching must not take such a large part in the school day that there is not ample opportunity for every child to work at his own rate. If quick children have to wait for the slower, their minds wander from the subject in hand, while the slow children give up the struggle and often settle down to that lazy mental drifting, when one thought leads to another and away from the first.

The rate at which one works is to a great extent innate

and each child has his optimum rate and also his optimum time for concentrated work. He should be encouraged to find both rate and time and helped to organize his day in such a way that it is possible for him to utilize his powers to the highest degree. Thus if he is working to his own programme at his own rate, he has at any rate the chance of realizing the value of concentration. Every encouragement should be given both to others and oneself to work at one's best rate; the attitude of the school should be approval of steady work and praise should be given not to him who finishes first but to him who works steadily to the end. Hence the value of an elastic time-table.

The time before a worker gets into his stride varies greatly from man to man; some take a long time but then can work concentratedly for two or three hours at one subject; others, less fortunate, take almost as long but cannot concentrate for more than one and a half hours. A third type gets to work rapidly and loses interest rapidly. In other words, staying power varies and the rate at which fatigue paralyses effort is not constant for all people or, indeed, for any individual at all times.

During the period when children are learning through individual play or group projects they do not need to know these facts, for they naturally adjust their plans to suit their temperaments and abilities. But as soon as a child takes responsibility for his own work these simple facts should be explained to him. There is nothing esoteric in such knowledge and the more a child knows of the working of his own mind and body the better. It is not, of course, suggested that we add psychology to an overcrowded curriculum, but that when a child is not working well, seems to be wasting time in flitting from one subject to another, to be dawdling or over-hasty in getting his task finished, then he should be helped to improve his methods of learning.

It is in all cases, I think, better to encourage a student,

however young, to organize his work in units of subject-matter than in units of time. 'History 1 hr.', writes the child on his time-table and he fills in a good part of the hour looking at the clock. 'I must do this Long Parliament business before I can come and help you,' said a child of ten and he did it! It took him fifty minutes of steady application. Even some university students seem to think that it is worthy to spend a long time on a subject, especially if it is distasteful. Surely the very opposite practice is praiseworthy. If the work must be done, it must be done and the more effectively one concentrates the sooner one can get to more congenial tasks.

Routine is a great aid to acquiring the habit of concentrated work—fixed hours, not too long, silent rooms, and some add 'work type' of furniture. There again people vary. A works as well out of doors as indoors, no matter how unconventional the setting, provided there is not an undue amount of wind; B can only work in one room and thinks of work in the garden as an impossibility. But on the whole children and young people work better in rooms specially adapted for the purpose—with comfortable but not easy chairs, desks at the right height and the air of steady work that we all sense easily.

(2) I have taken the question of finding one's best rate, time and conditions of work first, because adult students seem to be curiously ignorant about these questions and, indeed, lacking the most beggarly elements of knowledge concerning the best methods of doing concentrated work. But perhaps for teachers it is most important to realize that interest is the essential condition for concentrated attention, and so for purposive education. At first the child will concentrate all his effort on satisfying his innate tendencies—fear, curiosity, desire to build, or to assert himself, &c. From the earliest days a difference can be noticed in their power of attention or concentration—one child playing with his bricks for an hour while another is

weary of them in half the time. This fact is partly accounted for by the particular interest of the first child in that sort of experience, but also it may be a sign of the different temperaments, for the impulsive child seldom concentrates for long at a time. It is obviously most important that neither child should be distracted from his occupation, but the bird-witted child needs careful help. No matter how young he is, he should be encouraged to give more time, however little more, to his occupation, and no zeal on the part of his elder friend to keep him amused should cause her to find him some other occupation immediately. A healthy absence of exciting stimuli often forces a child to find occupation for himself. Watching happy independent people of three playing in a good infant school where it is not possible to 'keep' every child amused, one sees clearly how much occupation each child gets from the toys he has selected and how seldom one hears that depressing question, 'What shall I do next?'

At the stage in school life when formal acquisition of the three R's becomes a condition of further progress, education is still purposive if the children realize the necessity of reading, writing or doing sums. A very little discussion leads the children to see that they must practise these new arts and I have never known a school in which teachers were wise enough to wait until the children wanted to read where these practice periods were not faithfully kept. The joy about project work is that the children not only build a dock, organize a theatre, &c., &c., with purpose and concentration, but that it gives them the desire to acquire the skills necessary for their future life. What is more, each child wants to learn as quickly as possible and so the volitional habit of getting to work quickly and working with effort gets a start.

Later, given the right interests and the right environment, the growing boy realizes the world is so full of a number of things that he has no desire to loaf about and

make a task last longer than it need. Such intellectual malingering only occurs when the pupil knows that if he finishes his arithmetic quickly, either he will be made to do more examples of sums he already can do, or will have to do nothing.

Teachers sometimes complain that if they let children work at their own rate and go on to some self-chosen occupation when they have finished the appointed task, the task is often scamped. If such is the case the children still need further training in responsibility and here if anywhere should 'natural punishment', i.e. the direct consequence of one's actions, be the educator. If a task is scamped in order to read an exciting story book, it clearly must be done again in a child's free time.

Every subject well learnt contributes to the training in concentrated effort and I have often thought that university students would write better English, if from time to time throughout their school and college life they wrote, and re-wrote, deliberately and critically and at their own rate an essay to be signed under the declaration 'This is the best I can do'. At any rate, I have found it an admirable way of getting middle-school children to take responsibility for their style and to acquire a better standard.

(3) Lastly, there is a negative training that conscientious folk are loath to give themselves—that of not working when tired, and here a knowledge of one's rate of work and length of period for steady effort is essential. If, as a rule, a student who can concentrate on one subject for a couple of hours at a stretch finds his attention wandering after an hour, he should take action. If he is not unduly tired a break for five minutes or a change of occupation may be the effective cure; but should he find minor remedies ineffectual, it is far better to leave off and go for a walk, or a sleep, than sin against one's standard of steady concentration.

Some people escape the difficulty of training the self to

steady effort by arranging to work against time and, possibly, when it is one of the pieces of drudgery that every project entails, there may be something to be said for the plan. The justification seems to be that it works. But in the long run, if the reader is young enough to mould his will to the shape of his ideals, I think he will find that such an arrangement as will enable him to see an end to his task and yet not have the final rush, will be less exhausting and more satisfying. To an examiner there is real satisfaction in seeing a pile of scripts grow gradually less, and the joy when one succeeds in doing one or two more than the daily tale is one of the compensations for a dull job.

Thus, it seems to me, one trains the will suitably for the purpose in hand and many such opportunities occur in the life of the average person with averagely good standards. To take one's responsibilities as they come without any undue complaint; to organize one's life—which being interpreted generally means to forgo some more pleasurable occupation—in order to deal effectively with them; both necessities generally demand sufficient training to justify the omission of a formal type. And hence, as in nearly all cases, the training of will leads us directly back to the strength of our ideals and standards.

Hesitation

Here we have an attitude of mind that can be good or bad and that will need a fuller discussion in the following section. When a child hesitates before he carries out the command of fear or curiosity we see the attitude in its simplest form and clearly it had in more primitive times, and has still, a survival value.

As we shall see later, one of the most necessary sides of moral training is to train children and impulsive folk to leave a gap between stimulus and action in order that they may have an opportunity of considering the best means and the probable results of the action. Yet 'he

who hesitates is lost ' is proverbial and the misery that can result from a wavering will is patent.

It seems as though the term 'hesitation' is used to describe different states of the mind that should be considered separately.

The type of hesitation that is most easily cured is that which we all experience when we are still in the early stages of acquiring a motor habit. Thus on first driving a car a motorist may hesitate with fatal results as to which control puts on the brake ; later as to which gear should be engaged, and so on. The child hesitates as to which way to make d or p. All such hesitation is eliminated by further practice and the educator who does not use all his skill to induce his pupil to make necessary habits automatic is hampering the pupil's development.

A more difficult type of hesitation with which to deal is that caused by an unorganized sense of values. Boyd-Barrett carried out a research in which his pupils had to associate nonsense names with taste of certain liquids and eventually choose which liquid they would drink when two names were shown to them. Failure to choose correctly seemed always to follow hesitation as to which was preferred and not failure to associate the right nonsense syllable with the right taste.

The reader must remember that the basis of this conclusion could only be the introspection of the choosers, but it seems clear that the failure to make up one's mind on the better of two courses must impede action and is undoubtedly to some extent a failure of will. Indeed Boyd-Barrett declares that hesitation is a malady or disease of the will. ' It renders impossible serious motivation, it runs counter to volitional economy, wastes the force of the mind, fatigues and discourages. It leads to habits of irresponsibility, haphazard choosing and even neglect of duty.'¹ Hence he urges the acquisition of the volitional

¹ *Motive Force and Motivation Tracks.*

habit of decisive choosing and such self-training as will avoid that state of mind, best perhaps characterized as crying over spilt milk.

It seems to me that decisive choosing must be a matter of time. A sense of moral or aesthetic values is the result both of long experience and that organization of sentiments discussed in the last section. Such a result can only be acquired after many mistakes, and mistakes naturally imply some future hesitation. The student planning his afternoon thinks, 'Last time I chose to write an essay instead of playing hockey and was distraught while I wrote the essay and unpopular with the hockey team.' Again he must decide what to do, but if his first choice was not entirely successful he will naturally hesitate and spend time re-valuing his motives. I cannot think in the hundred and one cases of a similar nature that hesitation is bad. And when the valuation is made and the standard fixed such hesitations should disappear.

To assert categorically that hesitation is dangerous seems to me to assume that all people are made in one mould. Some need a far longer period of trial and error and a greater amount of experience before the organization of values and the choice of the right means are effected and hence before automatic choice, if this is not a contradiction of terms, is possible. It has already been urged that it is unsound to make children work at a speed or for a length of time that does not suit them. After all, most of us are not slow for mere fun; we knit, talk, work, memorize as fast as we can and our reasons for dawdling are not necessarily connected with our capacity to acquire the type of skill required of us. So with hesitation. In *Sentimental Tommy* Grizel was furious with Tommy because he failed to know his own mind—she being a young thing who always knew what she wanted. Tommy retorted that it was all very well for her because she had only one mind to make up, whereas he had many! In other words,

the natures of the two children were such that the organization of a sense of values was a far slower process in one than the other.

The type of hesitation that is in common parlance described as going back over things again and again, or repenting past decisions, seems a characteristic of character rather than of will, though once a man has come to the intellectual conclusion that further regret is a waste of time and energy, it is in some measure a lack of training that prevents his abiding by his decision.

But even here the problem is more complex than appears at first sight. I would not train any one, if I could, always to inhibit reconsideration of the past and the feeling of remorse. Out of such evaluations of past conduct arise a better system of judgement and high resolve to act differently in the future. To many of us such periods of self-criticism and reproach are necessary. Hence, the whole personality of a pupil must be known before he can be urged to refrain from reconsideration of his actions.

How much easier life would be, but how much duller if we could acquire a set of volitional habits that would do away with the necessity of hesitation and choice!

Nevertheless, hesitation can be almost pathological and when a teacher observes that a child never seems able to make up his mind and that his path through life is so zigzag as to make his goal unpredictable, re-education is absolutely necessary. So too, is it in the case of the direct opposite of the 'What I have done, I have done' type of man, i.e. the 'what I have done I wish undone' type. But such re-education is of the personality as a whole and brings us to the problem of training character.

Before leaving the question of definite training of the will, we may get a new light on the problem and especially of the problem of teachers from the following summary: The act of will implies the following stages:

A choice to be made between two or more lines of con-

duct. The choice may either be prior to the choice of means or be so connected with it that only by careful consideration can they be distinguished. But as in any new situation both end and means must be selected, time and opportunity for thought should be ample. With impulsive people, and that is the characteristic of most active-minded children, the teacher's function is to encourage them to look all round a subject, to be guided by intellect as well as emotion and when possible, to 'try out' their proposed plan in speech or some experimental form. 'What do you *think* of doing?' should be the teacher's question, and it is a proof of admirable training when the impulsive child answers: 'Well, I would *like* to do so and so, but I don't know if it's possible.'

When the choice of end is made and the means selected, then conation takes the place of high will and the striving continues till the aim is accomplished and the mind is again in a state of equilibrium.

But the best-laid schemes of mice and men gang aft agley and a very important result of education should be that when a man is faced with such failure he is willing to reconsider his past conclusions and actions and see what he can do to make the best of a bad job—whether he must call it unmendable and turn his mind to other tasks or whether he must repair the damage. In all such problems a man should aim at detached criticism and do his best to avoid self reproach or self pity.

CHAPTER XIV

PERSONALITY

THE NEED OF UNIFIED PERSONALITY

WE have discussed in previous sections the development of sentiments from the first simple emotions and their organization into systems ; the growth of knowledge from early sense experience into generalizations capable of application to varying situations ; sentiments, strengthened greatly by knowledge, have been shown to be the drives to action ; finally the characteristics of man's attempts to convert his desires into action have been considered.

We must now consider Personality in the light of this knowledge, for it is essential that all educators, including self-educators, should train themselves to think of mind as a whole, one energy, force, or spirit—what you will—manifesting itself sometimes in one way, sometimes in another. Indeed, we analysed it into its emotional, cognitive and conative elements in order that a better understanding of the whole might be finally attained, for it is necessary to discover the factors of any problem which we are trying to solve. All but the simplest problems lend themselves to this analysis ; all but the most primitive forms of life are amazingly complex ; most complex of all is the mind of man. Hence, a consideration of personality enables us to see how the characteristic states of mind react on each other and what steps must be taken to ensure that emotion does not drive out thought or thought paralyse action.

One of the most important facts for educators to realize is that however carefully they anatomize conduct in order to find the causes of an action, they must when dealing with the actor treat him as a personality, and the remedy of even the small faults of conduct is to be found in some remedial alteration of the personality and not in the suppression of a fault. Thus though bitter aloes may—it often does not—stop a child from nail-biting, the nervousness of which the fault is the outward expression is certainly not cured and will show itself in other ways.

By the growth of sentiment, the accumulation of experience and the training of the will, the child of undeveloped innate disposition, temperament and temper grows into a man of definite personality known mainly to himself through his desires, mainly to others through his actions or his character which is described as personality in action.

And herein lies the difference between the conduct of the little child, tending to respond to every new stimulus to interest and action, and that of the man with his organized system of sentiments and tastes, his mind enlarged by experience gained in multitudinous ways and able to be used in an infinite variety of circumstances, and a will ready to respond.

It is true that psychic energy displays itself in various ways and a man's conduct may appear to be without design, but in reality, in normal people, conduct is motivated and ordered and can, to a greater or less degree, be predicted. The fact that we can as a rule with some certainty know in advance what a friend will do or think is explained by his personality which shapes his ends. The growth is, of course, as slow as the growth of sentiment and knowledge, and undoubtedly some people never develop as consistently as others ; of them we say that they are irresponsible or of weak character. Again, children with marked dispositions, 'original' children as they are sometimes called, develop

personality more quickly than others who seem more 'normal'. But the average child needs very careful help in order that he may not get fixed attitudes of mind and volitional habits based on too limited experience of life.

CONDITIONS OF UNIFICATION OR INTEGRATION

Before however we turn to the part education and schooling can play in the growth of personality and character, it may be helpful to consider some of the simpler necessary conditions to be fulfilled if the various qualities of the mind are to be unified or 'integrated' into satisfactory personality.

(1) There is first of all the need of training all sides of a man's nature. It was shown in Chapter V that the child who had not sufficient affection and consideration bestowed on him developed characteristics that made his conduct unsocial. Thus he would feign illness or some other incapacity that not only gained him the required attention but also justified his failure to take a creditable share in the life of the community.

Again, the man who through lack of opportunity or time or native intelligence cannot be educated to extend the limits of his first-hand knowledge by thought is limited in his outlook and performance and likely to be a slave to his emotional prejudice.

And, finally, both the docile, disciplined child, brought up to obey but discouraged from thinking and acting for himself, and the spoilt child used to commanding service, fail to get that training in carrying out deliberately willed action that alone can bring ultimate consistency and satisfaction to most people.

Here then is the first condition for the integrated personality—an all-round training of the three sides of mental life that will ensure not only full emotional and intellectual experience and the satisfaction of transforming inner life

into action, but also the close inter-connexions of the essential and vital experiences.

(2) If all children were more or less alike an all-round education should result in all-round men—with emotions checked by thought and will on tiptoe to carry out desires. But temperaments vary so greatly, early experiences have such lasting and unknown effects that individual study of children becomes more and more important and self-training essential. Only the man himself knows the strength of his emotions, the horrible inaccuracy and awful chasms in his knowledge, the multitudinous times his will fails to carry out the dictates of his mind. He alone can take his education in hand and, from the first possible moment, this self-education should begin. Any educational practice that does not allow for the necessity is hopelessly at fault. Education that is not primarily self-education cannot in the long run profit a man.

(3) The third essential condition is to ensure that children are brought up in a suitable human and physical environment, and so important is it that a child should live in healthy surroundings, have the right kind of food, sufficient exercise and change, adequate sleep and warmth, that if one might only choose one reform—that of homes or schools—even teachers would be tempted to vote for homes. Homes here means far more than housing, though how the average hard-worked mother is to bring up her children cleanly and healthily in conditions that would appal the mother with a greater income passes my comprehension. The good home also stands for friendly understanding and patient help, no undue tampering with a child's sensitive unorganized emotional life, either by excess of petting or of terrorizing, plenty of occupations, many opportunities for self-education and for helping others. Such conditions are often fully satisfied in very poor homes, while every one is ignored in homes where the material conditions of life are ideal.

Professor Burt, in his work on *Delinquent Children*, states that, outside home influence, the chief defects in environment that lead to delinquency are unemployment, uncongenial schoolwork, defective or excessive facilities for leisure-hour amusements, the deliberate or unintentional influence of adult friends or strangers (cinema heroes for example) and the associates of the child's own age.

Now the delinquent is a child who, either because of some such faults in environment or difficulties in temperament and disposition, has failed to live his life in accordance with the social standards of his community; he is only some degree removed from the difficult child—such as the over-emotional and excitable, the untruthful or inaccurate, the lazy, the bird-witted, the unreliable. For all such difficult children there is no hope of re-education unless having discovered what caused them to plan their lives on a bad pattern, we then try to eliminate as far as possible those defects in their environment which are hindering them. Unsuitable or insufficient food, clothing, wrong conditions for sleeping, unsatisfactory friends, boredom or over-pressure, may all be effective cause of difficulty.

Clearly the aim of all educators is to give every child the conditions both physical and mental that will enable him to grow to his most lovely and happy self. It is far easier, difficult though it be, to give children the right surroundings, to deal with the problems of adjustment as they arise, to encourage the right occupations and help a child to solve his emotional problems than to re-educate the already maladjusted child. Most children are good and reasonably happy and so too is the average kindly rich man in his castle and the poor man at his gate. Education, in its broadest sense, has kept them averagely kind, truthful and honest, with simple not very intellectual pleasures and a real sense of responsibility, at least for a small circle of people. What we all want to do is to raise the standard in each department of life little by little and step by step,

always with the knowledge that in so far as we improve conditions and give men chances of growing fair and straight we are making each generation more civilized, better educated than their fathers. Indeed, eventually men will be like gods.

THE TREATMENT OF DIFFICULT CHILDREN

General Suggestions

Let us consider the general suggestions for re-educating children first and then consider some of the types that are often found in ordinary schools.

Again Professor Burt is an invaluable guide. He insists, of course, first of all on as careful and thorough examination as possible in order to discover the cause of the difficulty—emotional disturbances, difficulty with school work, unsuitable physical conditions or employment, &c.

Only when the cause has been found can re-education begin and this generally implies 'new and more complicated ways of behaving, elaborated always out of simpler and more instinctive tendencies under the pressure of their emotional excitement'. Thus the child who lies through fear must be extolled when he speaks the truth and go unrebuked for the confessed fault—thus using 'the fixing agency of pleasure and success' to re-educate him in a new attitude to truth. As the new standard of conduct flickers into flame in all probability the child will be subjected to moral conflicts, varying in strength with the hold that his previous habit had on his conduct and the emotional fervour with which he is striving for the new behaviour. Here he will need all the help that can possibly be given him—he must not refrain from stealing because he is now afraid of being found out—but because he has faced the thought of himself as a thief and disliked it. Hence it seems as if at moments of conflict, and they occur in all struggles for a new emotional habit, the educator must do

all in his power to give the child assurance that the new ideal can and will prevail.

The best assurance is to trust the child, and the skilled educator is he who knows how far he can extend the trust, for the temptation must not be too great. To send a really hungry child, who never has cakes, to sell the cakes made in the cookery centre, is asking for trouble, and I have not much patience with the teacher who knew the number but did not tell the girl because she suspected her. Re-education began with a teacher who realized the girl loved the little cakes and arranged that she should have one for every six that she sold; at first they counted the cakes together and worked out what they must be sold for. When the girl was told to do all the counting and save the teacher's time her pride was heartening to see.

Finally, apart perhaps from the gay eager encouragement that an elder person can give to the child who needs help in his attempt at re-education, no force is so potent as the right tone or discipline both in school and home.

Bagley defines discipline as 'a fashion for good order' and a naughty child who is removed from a class in which his defiance has made him a hero almost immediately changes his conduct when he finds the fashion demands consideration for others, courteous behaviour and hard work. In this sense discipline is as necessary in the home as in the small class, in the small class as in the large. What types of restriction must be imposed depend, of course, on the conditions, the size of the room, the sort of work to be done, the number of people. But so long as the group is protected against a self-asserting individual 'out' to be disturbing and—even more important—such an individual is protected against himself, that community is adequately disciplined. The 'proofs' of good discipline under ordinary working conditions are not immediate response to an order, for some children may be too absorbed

to hear quickly, or absolute silence or good posture, important though it be; but hard careful work from all the class, friendly helpfulness and thorough enjoyment of the day's work.

How such discipline is to be ensured is such a personal matter, so closely conditioned by the personality of the teacher and the growing personalities of the children that it is almost impossible to give general help. However, I am sure that most children individually and as a class respond to friendliness and obvious interest in their well-doing and, with a little patience and confidence of ultimate success, the averagely good teacher can win the trust of a class. But the friendliness must be genuine, for it will be remembered that it was pointed out earlier how quickly children 'catch' a feeling and they know at once who are the people who like them and want to help them.

Suitable and interesting work is, of course, equally important, and no child should be driven to naughtiness because he can't do the work of the class or because he finds it too easy. Professor Burt cites the case of a boy who was brought to him because he was said to be an incorrigible thief and the cause was alleged to be mental defect. But on being tested he was found to have average intelligence and should have been able to do the work of the class easily. However, at the age of five and a half he had been away from school with measles and had been promoted to the boys' school while he was still unable to read. No one taught him and he idled. He was taught, found himself able to get on in class and settled down to get his excitements and occupations in more legitimate ways.

Finally, there is the treatment of the malefactor himself. Here again there are two conditions of universal application.

The malefactor must never find himself a hero! In a schoolroom with rafters there was a daring boy who climbed

them. The class were all agog to see what the teacher would do and she, terrified at what might happen, ordered him down on the threat of calling the head master. He came with the deliberateness of one showing his skill to a delighted audience. She told the head master at the end of morning school and he, scenting further difficulty, gave her friendly advice. A day or two after she went in to find two boys straddling across the rafters, but apart from nodding to them and saying the customary good morning, work proceeded as if all were seated in the usual manner. The class got busy and the rafters got uncomfortable; playtime came and the class went out. At the end of play the teacher said casually 'Would you like to come down now?' and when the class returned they found two subdued and crestfallen young men very eager to escape notice.

Neither must naughtiness pay, but the danger of this result was considered in an earlier section.

The following notes on children who present special difficulties help to summarize many of the topics discussed in these last chapters.

The Inattentive Child

One constantly hears complaints of children who could, if they would, but who wool-gather or dream their school life away, only attending sporadically and then often with little result as they have missed necessary clues. Teachers generally look on this characteristic as intellectual in origin, but very often such children have a high rating on the standard tests for intelligence.

The causes of absentmindedness are many, but the result is always that the sufferer turns his attention from the subject in hand. Hence the only hope of altering the attitude is to find the cause of the child's lack of attention.

Children who temperamentally are interested in them-

selves and their inner experiences—sometimes called introverts—are especially prone to this difficulty and tend to get satisfaction from inventing incidents in which they are the hero admired by all. They use their emotional urge to conduct in various forms of fantasy and find the imagined actions so much more interesting than applying themselves to the matter in hand that they simply can't wean themselves of the pleasure.

In very serious cases a psychologist should be asked for help, but in cases of ordinary difficulty the child should be given every opportunity for imaginative work. If he can tell his stories to the class and write a magazine, as likely as not he will find the approval of his community so pleasant that he will be drawn a little more out of himself. Some people say that he should be given a great deal of practical work, but such children find it so much easier to get self-approval through verbal prowess than through creating in some form of material that they often dislike this form of expression. When, however, they do like such work they should be encouraged in it. After all, day-dreaming is a delightful occupation that most of us indulge in from time to time and should do so more, were there not so many calls on our interest and time. Certainly no matter what the cause, the greatest chance of socializing the child lies in finding the type of work most interesting to him.

In some cases a child who is not specially prone to day-dreaming indulges in it because he finds it impossible to attend to the subject in hand—he does not understand or his experience of previous lessons tells him that this one will not be interesting. Here the fault probably lies in assuming all children can be 'made interested' in the same subject and in the same way. If more individual work was done and children only came to lessons—or students to lectures—when they felt they wanted help there would be less day-dreaming in class.

The Timid Child

Such a child often indulges in day-dreaming because he desires to act but fears to try, and his great need is confidence. He is probably the result of unsympathetic handling, and once he finds that he is not scolded if he spills his paints or gets his sums wrong, and that what is wanted of him is to try to take some share in class work, he will often develop the first signs of courage. Frequently the most helpful treatment for such children is to enlist their aid. They will help a busy teacher to count books, a less good child to read or do a sum, and in helping will get their first feeling of confidence.

Sometimes such children can be helped by showing them that their fears are groundless and that nothing happens if they do give the wrong answer.

Even with the youngest, friendly encouragement to be brave from some one they love often initiates a new habit of effort. I do not think that it is helpful to make such comparisons as 'You see, Mary answers questions in class and does not mind when they are wrong'. For though the child may be too shy to retort, he often thinks: 'But Mary's different.' And he is right.

The Defiant Child

He is in some ways much easier to help. He has probably made himself a nuisance at home or at school or both by his self-assertion and driving curiosity and his adults have made a concerted effort to 'squash' him. He realizes this, realizes too that he is often snubbed when a more popular child is approved, and he feels balked. Balk a strong urge to action in any one and anger is aroused. Fear may prevent the child from being openly defiant, but in such cases he often sulks and this form of opposition is more difficult than open defiance.

It always seems best to give these children as much

freedom as possible and to let them realize that neither defiance nor sulkiness is taken seriously. Surely when a balked child finds he can gain power over his elders by defiance or sulkiness, he will do so.

As in every case, more free work and plenty of occupation that will use up his energy and rouse his interest are the safest cures. Nearly always defiance is caused by over-organizing and interference.

The Contra-suggestant

This type is another example of the maladjusted child. He feels an outcast from his fellows and yet wants to be of value in his community. As he cannot find scope in the ordinary occupations, pleasing to most, he rejects them and says 'No' when others say 'Yes', never agrees to a suggestion for activity and generally opposes the majority. He is in a sense extremely suggestible, for the others have only to say it would be jolly to act *Macbeth* for him to feel and assert that *Macbeth* is a totally unsuitable play. His class tends to spoil him, for he is generally a boy brimming over with energy and ideas that have not found approved outlets; hence he is given what he wants by them—the power of leadership. Constantly one notices that he chooses his friends from people he can dominate—perhaps a case of the patient knowing his own best remedy, for he does not have to assert himself with such friends and he may in the happier atmosphere grow out of the habit of contradiction. But unless his fault is explained to him and his intellectual training goes on the lines of finding what seems good and possible in a proposal rather than at once opposing it; in other words, unless he is helped to defer opposition until he is intellectually convinced that he has good cause, he will lose much as he grows older, for he will assume the government is always wrong, the majority's praise a reason for dissatisfaction and so on. After all, the government is occasionally right and

the majority does occasionally spot the great author or musician.

The cure of one very able lad was only begun when he was taught sufficient psychology to understand that he was just as much a victim of suggestion as the ordinary people whom he despised. The urge to come to a conclusion, it was pointed out, is always more or less emotional, but the conclusion should be reached in accordance with the laws of thought and not at the command of a feeling of opposition.

Children with Intellectual Difficulties

All children and all men, of course, have intellectual difficulties, but here the type that is under discussion consists of those children who are of average or even superior intelligence and yet do not get on at school. They are either reputed lazy and capable of doing better or they are good at most subjects but very poor at one or two—generally, arithmetic or handwork in some of its many forms.

As was suggested in Chapter V, poor work is often an attempt to get attention without making effort, and hence it may be caused by either some emotional difficulty or fault in will training. But the work demanded of the child may be so little worth effort that he does not exert himself to do it well. He should, of course, feel it his duty to do it well and feel ashamed at such easy work conquering him, but if he felt like that he would not be himself.

Such children at once improve if they are set to work with their intellectual equals when they can be taught in a way that uses all their native intelligence and special aptitudes.¹ But if this is not possible it is another extremely cogent argument for far more individual work.

Children may have to work in one room, but there is

¹ See, for example, the account given of John, pp. 55-6.

no reason why they should not teach themselves at their own rate and be given help as they need it.

Nor should intellectual success or failure be treated as a moral quality. If a child does well we should be pleased and encourage him to use that good mind of his better; if he does badly we should do our best to find out his difficulty and help him to overcome it.

Special difficulties, e.g. inability to do arithmetic, should never keep a child in a lower class than is suitable for him. Adler maintains that all these special difficulties, especially with arithmetic, are but manifestations of maladjustment to environment. The child for some reason shirks social life and does not want to be judged by the standards by which his fellows are judged. Arithmetic above all subjects can be judged by results, and so the child says he can't do arithmetic!

I am inclined to think unpsychologic teaching has more to do with such problems than any other cause. If a child is scolded for bad work, he tends to dislike the subject, and if his teacher is worried about his results he feels that atmosphere and is worried also. Bad early teaching is always a stumbling-block, but especially in arithmetic. Until children have had a great deal of experience they do not and cannot make or apply generalizations of so abstract a nature as those necessary for any but the simplest work in numbers. Hence, teachers anxious to get children to do 'real sums' suggest the necessary generalizations and persuade themselves that the class understands. Not once in a hundred lessons do you hear a child say 'hence the rule'; it is always the teacher who, after giving the illustrative material he thinks necessary, enunciates the rule for finding area, interest, dividing fractions, &c.

If only children could be allowed to work at their own rate, to collect their own experience and enlarge it as they found a need; if only their generalizations could actually be theirs and not verbal statements learnt from a teacher

and very often applied unintelligently ; if only the formal teaching of arithmetic could be postponed and children of nine or ten allowed to begin 'real arithmetic from sum books' as a great honour and proof of their maturity ; then indeed, the less intelligent would leave school with a rule-of-thumb knowledge of money, weights and measures, which is all they need, and the more intelligent would learn so quickly and easily that they would acquire far more in the last four years than now they do in the eight years of school life. We do now realize that the age of reading varies from child to child and that a child who wants to learn easily acquires the art in a few months ; indeed, each generation of teachers is more inclined to postpone teaching until the child is ready to learn. But most teachers are themselves so afraid about arithmetic that they lack the faith that would let children learn it in their own way and at their own rate. Until this faith is held, arithmetic, one of the most interesting and exhilarating of occupations to the happily taught average child, will be a failing subject.

Finally, if a boy, going on to a Univeristy, reaches the matriculation class and is still hampered by poor mathematics he should be re-educated. The first step is with gaiety and patience to help him to see that though some few of us are born mathematicians the rest are just averagely intelligent folk who can 'do' elementary mathematics if we tackle them properly and don't get balked by our fear. The next step is to give encouragement and the best method is to go back and back until we find what he can do. Often such children say they know how to do a given type of sum and don't really understand what they are doing. In such cases they must get themselves into a difficulty before they can be helped, for they are suffering from feeling helpless and help can't be thrust on them. I have had to wait until nearly all my patience had oozed out of my mind while a girl insisted that her way would solve a problem

when her way obviously couldn't. And once she felt one's impatience a whole week's crop of confidence might be—and was once or twice—destroyed.¹

The reader may think such re-education is not worth the time and trouble. It is impossible if the pupil does not want to acquire the skill, but if he does, a re-education that gives confidence, that takes the pupil out of a special class of 'can'ts' and puts him into the ordinary class of 'cans', that encourages him to conquer difficulties that have bothered him for some large fraction of his life, is surely of enormous value in the growth of personality and character.

The Obstinate Child

If any generalization is safe about difficult conduct it is that in nearly all cases it is due to some emotional cause that very often disappears with sensible treatment. Thus a little child is often obstinate merely because he is beginning to be aware of his own power and he wants to find out how far he can defy or go counter to the commands of more important people. Here obstinacy is a case of self-assertion and if the child is given better ways of using his power, and he is made to feel that his fellows are co-operating with him and are not in any way against him, he grows out of it.

In other cases obstinacy is a symptom of fear, as, I suppose, it is with a horse with a balky will, and the only hope is to remove the fear. This is probably the explanation of a child's insistence on repeating the same mistake each time she gets to a certain point in reading or arithmetic. She says the word 'black' wrong, is corrected and told to re-read the passage; but her fear makes her word-blind. When she reaches that point where she read 'black', she reads 'black' again. There is only one cure in a case like this—leave the child alone with no feeling that her mistake is serious. On another occasion in entirely

¹ The girl passed her qualifying examination—a year later than the average entrant.

different circumstances she can be taught to read the word correctly.

This is a simple example of numerous inhibitions or compulsions that involve people of all ages in unsocial conduct. Punishment only makes matters worse. The one hope is that some one will be sufficiently wise, patient and leisured to find out what is wrong in the child's attitude and get him to look at life differently.

In an earlier section ¹ the problem of the obstinate man who prides himself on his strength of will was considered. Children can be checked in this attitude, especially if they are intelligent, and this case is mentioned here to show how direct the connexion is between true education and behaviour. Such a child needs both intellectual training in seeing two or more sides to an argument and in sympathetic understanding of other people's points of view. And above all he needs freedom to think his own thoughts. Even though we insist on imposing our points of view on people who daren't say they think them stupid, they are still flattering enough to shape themselves in our likeness and to assume that it is a sign of strength and importance to speak with authority and refuse to listen to argument.

The Bird-witted Child

I have used this as a generic term to describe the type of child who strews his path with unfinished work and who flits from interest to interest and occupation to occupation. In an earlier section it was suggested that such a child had not sufficient persistence to see a matter through, when the first strong emotional urge to action had abated.

Another useful way of looking at the problem is that he lacks concentration and his interest consequently is transitory. Now unless one has enough experience to find interests in various slightly different aspects of an object, interest

¹ See p. 162.

is bound to go. For instance, if a child's only interest in painting is sloshing large dabs of paint on a piece of paper, he will soon need a new occupation. And if his education, or lack of education, has been such that he has at once been able to turn to a new sense stimulus, he will never learn to get the pleasure and absorption that is the result of getting secondary and more complex interests in the simple object. Deeper and more lasting interest does not develop at once, and the teacher's task is to help the child to continue the occupation at the cost of some effort, in order to give this secondary interest opportunity of growth.

All such difficulties are greatly enhanced by the neglect of a child's characteristics. In discussing the question of concentration¹ it was shown that the rate at which people became absorbed in a piece of work varied considerably, and in the case of a bird-witted child efforts should be made to transfer his interest quickly from one aspect of the work in hand to another. Thus it is almost useless to say to a little child, 'Go on painting that flower till you can do it better.' He is tired of painting the flower and skill lies in suggesting to him some such reason for looking at it again and copying it more accurately—that he gets the six white petals in so beautifully that some one thinks his picture is a real flower, &c.

Such children very often need the steady influence of routine and their desire for change should not find easy satisfaction. The skill of the teacher lies in finding occupations for them that they see are necessary and which will keep them happily but not excitedly employed.

There is not any possibility of formulating rules generally applicable to such children. Lack of concentration or bird-wittedness, obstinacy, etc., are faults for which the causes must be sought in the growing personality of the child. It is this need of knowing the individuals of a class, of having sufficient knowledge of psychology to see the

¹ See p. 183.

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probable development of certain unchecked characteristics, of having definite standards of what makes for happy social life, that makes the modern teacher's life so strenuous, so varied, and so interesting.

CHAPTER XV

WHAT EDUCATION SHOULD ACHIEVE— THE FUNCTIONS OF THE SCHOOL— TESTS OF ACHIEVEMENT

GENERAL AIM OF EDUCATION

IF the reader of this chapter has read the greater part of those preceding it, he will probably understand why we are ending with a discussion on what education should achieve or, in other words, at what educators are aiming. No one can decide for another what is exactly the right education for him and only the teacher who knows all the conditions can decide what he can make of his class.

Throughout this book the need of self-education, with purposive work as the means to it, has been urged and throughout the thesis has been maintained—and I hope established—that the teacher of to-day has for his main concern the healthy mental and physical development of his pupils. That he aims at helping them to become imaginative, unselfish people, capable of thought and sympathetic conduct; able to act in accordance with self-imposed ideals and acquired tastes; such is perhaps the statement that a teacher would make when thinking of his work in school.

But if the wide aspects of education are considered when parents, guardians, teachers, above all one's own generation are all-important factors, and when the process of education lies in the educand adapting himself to the human environment, then it becomes apparent that it is not what one 'learns' but what one is, not what one knows about history,

language or art but what satisfaction one gets, not even what one does but why one does it, that are the tests of the educated man, who alone is able to get the best out of this amazing experience that we call life.

And to get the best out of life mental health, or a personality at peace with itself is even more important than physical health. Indeed, as has been already pointed out, mental health is essential for physical health.

Hence it seems to me that all educators in their own very different and, alas! often contradictory ways, are concerned with the child's growing personality and consequently with the content of his mind and his behaviour towards his fellow men.

Where we differ among ourselves is in what kind of personality we encourage, what knowledge we think worth while and what conduct desirable. In this section I am only writing by the faith that is in me and ultimately each one of us must make up his mind what he wants to achieve in life, both as an individual and as a professional worker. His conduct as a man and a teacher will reflect his conclusions.

This, then, seems to me to lead to a full and satisfying life : that a man should have full opportunity of developing in both body and mind ; that, for this reason, both physical and mental training should be as complete as possible ; that no one should be exempt from serving as well as being served by his community. To me this statement seems but a more amplified way of saying that a man's personality should develop into a harmonious unity ; that his education should make him one of Bacon's ' full men ', and a citizen of the world.

So much has been written directly and indirectly about the growth of personality in previous chapters that it is only necessary to summarize the findings already reached.

Each child has his own temperament, temper and disposition ; his way of interpreting life is as dependent on

his innate mental as on his physical characteristics. The first and most important work of the educator is, as far as he is able, to 'control' the child's environment and experiences so that he may be prevented at least from serious misinterpretation. The child's interpretation of life and consequent growth of personality is bound to reflect the ideals and standards of the people around him. If for some reason he finds himself in a universe where the people he is growing to respect and love have divergent standards, the task of adapting himself happily to his world will be most difficult. He will probably tend to become a different child to different people. If the reader thinks that unified personality is important he will see how much self re-education is in store for such children and how difficult it will be.

The growth of personality is a slow and natural process and educators are at fault who try to hurry it or to impose, as it were, a fixed form. The timid child, it is true, can be helped by the ideals and conduct of those around him to standards of courage, the child with a thirst for experience can be shown the cruelty of various forms of curiosity; but trying to make A into B is futile and stupid, since it is based on the fallacy that it is possible and desirable to make silk purses out of sows' ears, or to play piano sonatas on a saxophone. Educators are there to see the present and potential beauty in each child and to give each one every possible chance of growing beautifully; they are not there to develop interesting eccentricities—the box tree cut to resemble a peacock.

Mens sana in corpore sano is so much a part of an Englishman's faith—though he often misinterprets what constitutes a *corpus sanum*—that the value of good physical surroundings, proper diet, sufficient exercise and play need not be emphasized here. The other side of the picture, *mens sana ergo corpus sanum*, is that painted by modern psychologists, and must certainly be considered most

seriously by all people responsible for the education of others, to say nothing of themselves.

And in connexion with this aspect—the effect of mind on body—must be urged the necessity for free play for the youngest, merging into freely chosen occupations and ample leisure to live their own lives as people grow older. No fear that children will abuse their leisure should lead to perpetual organization of their lives and constant supervision. Free children and self-educating young people are perhaps more tiring to live with and show more clearly such faults as are due, after all, mainly to education: lack of real interest in knowledge or art, lack of imagination and understanding of others' needs. But in such freedom lies the only hope of a generation of active participators in the art of civilized life, trained to adventure further than their fathers.

EDUCATIVE INFLUENCE OF THE COMMUNITY

Life is the greatest educator and so large a fraction of youth spent at schools and universities can only be justified if it can be shown that these places of learning have special functions. It will be easier for the purpose in hand to consider briefly the general education a child should get from his community before examining the special functions of school.

Even if it were possible, no community can leave the education of children or young people entirely to professional educators. It was pointed out how great was the influence of a child's experience in the pre-school years, and throughout school life the attitude of his community to learning, to say nothing of the attitude to teachers, influences younger people greatly. Here it must suffice to say that the child is blessed who comes from a home where there is an active respect for accurate knowledge; where there is sufficient wise tolerance to leave people to seek

for it in many ways and places. On the other hand, the child is handicapped who comes from a home where knowledge is neither respected nor sought, or where the great realm of wisdom is reduced to a tiny parish and only those who seek it there are approved. Thus the son of a classics master is cowed and depressed if his father dubs chemistry 'stinks' while he finds his interest only on that side of knowledge.

In these and in multitudinous other ways does a child's community influence his attitude to learning, and both directly and indirectly is it influenced by the standards of the community about such problems as the value of good work and the necessity of training for it; respect for books and the necessity of providing libraries for all; willingness to forgo certain pleasures in order to afford others; and indeed all the multitudinous ways in which people spend their leisure hours.

Teachers have undoubtedly great influence over their pupils in all these vital matters and only in so far as they do take such duties seriously can they be called educators. But if such training is left entirely to them, children are either torn between their loyalty to two sets of standards or they accept those of home or school and look down on the others.

Again, more can be done out of school than in to rouse respect for all forms of service and good work. Even in the freest and happiest school, certain duties have to be imposed on children who tend to think of such work as they do as monitors, prefects, &c., as part of school life. Such training is obviously valuable, but it is unlikely that it will 'carry over' to life outside the school. Also the greatest need for most of us who are average people is to learn to serve in humble situations just because our work is necessary.

Hence the importance of a community's attitude to work in all its forms. Ernest Pontifex, finding his boy interested

in practical life and not in books, set him up in life as the owner of a barge, mainly because he himself had been driven into a gentlemanly occupation for which he was entirely unfitted. Such misfits in life are often the result of the parents' attitude towards various types of work, and teachers also offend here. They try to make an able boy take teaching or go into the Civil Service because it will be a 'step up' in the world. It will be so to him only if it brings greater opportunities of development.

If all children were educated together until eleven; if all educators, including teachers, respected good work as good work only, and refused to value it for such adventitious accessories as money or position; if all of us who have work in which we find lasting interest felt so strongly that we owed a debt of gratitude to those of the community who take on the more monotonous tasks, that we were compelled to ensure them conditions of life at least as good as our own; then, and then only, would the children growing up in our community have the right attitude towards all forms of work.

THE FUNCTIONS OF THE SCHOOL

Here at any rate we seem to be on safe ground, for a civilized community spends money on schools and steadily raises the school age because of the need for the new generation not only to learn what its fathers learnt but also to push the boundaries of knowledge a few steps farther. Whatever parents say about what was good enough for them is good enough for their children, when judged by their actions they are found to want more, and it is equally true of communities.

We in England during the last thirty years have quietly revolutionized state education—increased facilities for secondary and university education, better training for teachers in elementary schools, far better apparatus,

medical inspection, school meals, school journeys and holidays are but a part of what the child gets in 1934 that his fathers had to do without in 1900.

That in spite of this progress most of us are still dissatisfied is a proof of the growth of social feeling, a characteristic result of the greater civilization due to thirty years of education, for undoubtedly the schools and universities are one of the greatest civilizing agencies in the life of the state.

In general terms the function of schools is to give to their uttermost the education of the civilized man, and to take upon themselves those tasks which are better accomplished by professional educators than by the other members of the community.

Teachers are much more free in England than in any European country with which I am acquainted or in other parts of the British Empire, and though one hears a good deal about reactionary inspectors, closer examination often, though not always, reveals timid or stereotyped workers who want some reason against venturing on new methods and breaking away from old school traditions.

At any rate no teacher who is really a believer in modern methods need be checked, for he can always quote chapter and verse advocating his practice from the authoritative publications of the Board of Education. The reports of the Hadow Committee on *Infant and Nursery Schools*, *The Primary School* and *The Education of the Adolescent* and the *Handbook of Suggestions for Teachers*,¹ if sensibly and systematically applied, would satisfy the great majority of educational reformers and give us such intelligently educated children that the brave new world would be in sight. And while these findings are being worked out in our large state schools, there is a gallant army of experi-

¹ None of these pamphlets costs more than 2s. 6d. and the four can be bought for 9s. Why every teacher does not read, mark, learn and practically apply them is a riddle. But many of course do.

menters working in the smaller private schools who are blazing new trails.

Whatever methods we choose to use in our teaching and whatever reforms we introduce into the curriculum, there are certain duties that must be carried out by the teaching profession.

Teachers are responsible for the technical training that will enable their pupils to live the ordinary life of their community. I suppose all would agree that the minimum should be the three R's, physical training and some necessary accomplishments like dancing. The maximum cannot be summed up—for a would-be chemist it might begin with the capacity to blow glass and end with a special technique needed to carry on some branch of difficult research.

Secondly, all teachers are expected in some way or other to be able to give special help in the advancement of knowledge and skill. The community as a whole and parents in particular send children to school in order to learn. In this sense the schools might be called Children's Universities.

Lastly, teachers at any rate in England are more and more expected to train character as well as to impart knowledge and skill. Let us take these three duties in order.

TRAINING IN NECESSARY ARTS

I have taken this part of the work first because it seems to me that if teachers did not teach the modern child to read, write, understand simple arithmetic, to sing, dance, play games and a host of other necessary accomplishments for the civilized man, very few children would even reach the point of education which their parents achieved.

Already in earlier sections psychological reasons have been given to show that children living in a civilized community, if properly taught, feel the need of acquiring knowledge and arts necessary for life and that modern

methods are based on this assumption. Indeed, it is so generally accepted by us all that teachers are responsible for such work that here it only remains to suggest certain corollaries to the assumption that are not always considered either by parents or teachers.

It is important that every child should learn to read, write and be able to manage his own money matters, but it is not important that all of them should reach the same standard or reach it at the same time. This thesis has been maintained throughout this book and it only remains to be said that a teacher who really respects knowledge will find ample and compelling evidence in modern psychology to justify her waiting until her pupils show desire and willingness to learn.

Parents seem to resent the slowness with which many children acquire the arts, especially reading, spelling and those branches of arithmetic on which the average adult considers himself an authority. They rightly urge that children are not fairly treated unless they are brought up to the standard of the qualifying examination that they must pass in order to get further education. But the necessity is no justification for forcing formal learning on a child.

In the first place, the teachers in elementary schools can almost with certainty say who will get entrance scholarships to secondary schools, and to force the rest of a large lower school to learn at the rate of the minority is preposterous. In the few cases where children get a scholarship because of the teacher's skill in persuading the examiners to overestimate his pupil's ability, the after-results are bitterly disappointing. The child's personality has been forced into a false mould ; he seldom makes good in his new school and often takes up life-work for which he is ill-suited. As great an expert on examinations as B. C. Wallis writes protesting against all forms of pressure and pointing out that the pace is set by teachers. ' Mis-

guided parents and over-conscientious teachers believe that a little bit of extra coaching, an hour or two of special preparation, may result in an individual child's success. . . . Practical experience indicates *cramming does not pay*. The scripts of any scholarship examination provide the evidence every time. What amount of cramming will add a fraction to the inherent mental power of the child? Teaching is an interaction between teacher and pupil and examining is a reaction of the pupil to the stimulus; the examiner wants the reaction from the pupil alone, and the crammed child is choked, so that the reaction is slow and laboured. Cramming will not give powers of insight and vision to the child. . . . To the child a scholarship examination should be a routine incident in school life, an incident which by its very novelty becomes a joyous adventure. . . . Let the teacher have faith in the product of his year-long labours, so that the native capacity of the child, fostered and guided by well-thought-out plans, which began to operate when the child first toddled to school, may respond freely to the stimulus, the exceptional stimulus of this one day. Let the teacher forget or ignore the examination as much as possible'.¹

As far as I know, this advice is equally applicable to teachers in preparatory schools. In all cases with which I am acquainted the children who take the examination in their stride do at least as well as those specially prepared. When the syllabus is such that children must forgo some of the projects by which they educate themselves in their own way, they accept the passing of an entrance examination as a necessary project and tackle it accordingly.

I am almost afraid of being accused of dragging in King Charles's Head when I add to the above comment that there are skills equally important as reading, writing and arithmetic and, indeed, more important for young children. Perhaps this point is dealt with better under the discussion

¹ B. C. Wallis, *The Technique of Examining Children*.

of schools as universities for children, but teachers in a modern community, where rightly or wrongly, parents seem to leave more for teachers to do, must face the fact that if children do not come to school possessed of the necessary arts of living—hygienic habits, good posture, good clear speech, 'handy' hands able to sew, mend and make, bodies able to climb, run and swim, that such training, essential to healthy life, must be part of the curriculum of the modern school. The child free to learn in his own way often finds them far more useful than the three R's and more technical learning and consequently acquire them sooner.

If one thinks of education in terms of life rather than in terms of school tradition, surely such training and the kindred aesthetic expressions of singing, dancing and some form of plastic art, should be acquired earlier than reading and writing which demand careful control over, and co-ordination of, a host of minor muscles. Also each art learnt is a possible gateway to interest in knowledge and to many the only gateway. Knowledge is very seldom interesting to the majority of people for its own sake. Most seek it because they find they must have it for some definite purpose of a practical kind.

THE ADVANCEMENT OF KNOWLEDGE

I suggested that in so far as it was the function of a teacher to enlarge the scope of a child's interest in knowledge and to add to his store, he might be considered as a professor in a university for children, because thus, it seems to me, a new light is thrown on a teacher's relation to children as learners. The joy of university life to a keen student lies largely in the fact that there he can find people who are interested in the subjects in which he is interested, and who can put him on the right line for acquiring the knowledge he is seeking.

A university as its first duty has, I suppose, the advance-

ment of knowledge, and success in examinations should be but hall-marks of a student's career there. Now schools too should surely be places where children find people far more learned than themselves who are able and eager to help them to gain such knowledge and experience as they are seeking.

The first question should not be 'What do you know?' but 'What do you want to know?'; the first discipline not 'You must learn this' but 'If you want to learn that, you must follow a certain course'. The first training for a teacher should not be how to give a class lesson, though that is, in all seriousness, an important technique to acquire, but how to recognize the sort of help a child must be given to further his search for knowledge.

Hence the importance of the organization of a school in such a way that the children can find, at given hours in given rooms, specialists eager to help them and that they can study the possible courses of work from fairly full syllabuses. Then children needing help will attend suitable lessons as a matter of course, just as university students would. Children who think they do not need the help, either because they do not intend to work at that subject or because they can teach themselves, should be left to work alone. The monthly or termly test will show if they are mistaken. In many other ways the analogy with university life is illuminating. The form master should be the supervisor of studies for the children in his form and he should indicate certain broad lines which a child must follow in his selection of subjects.

Sooner or later if the boy is to leave school a reasonably well-educated fellow he must know something of biology and of the exact sciences, have made some approach to historical and geographical learning, at least as far as to appreciate how far back into the past go causes and how intimately connected are the peoples of the present day; he should have enough mathematics for his needs or for

his intellectual curiosity—whichever is the greater—and have begun the study of literature and the practice of some art which he loves. But how he gets such a training or whether he works at geography for a couple of years and then suddenly branches off to history does not seem to me to matter. He will, if he intends to enter a university, have to fill in gaps in his last year or two, before matriculating. He will, if he is leaving school at sixteen—more so if it is fourteen—be rightly left more free to satisfy his own interests, for these last years must be for him the final preparation for his future leisure hours. But in all cases the scholars should seek learning and be grateful for the help of teachers and not have it thrust on them. It is the barest minimum of food that we insist on a child's eating nowadays when he is not hungry and, indeed, most doctors say the wisest plan is to wait till he is hungry.

Minds seek food as eagerly and as imperatively as do bodies and it is no ideal of an unpractical lover of learning that is urged here. Half the difficulties in school life—the boredom of one type of child, the over-anxiety of another, the defiance of a third—arise because teachers insist on certain subjects being learnt in a certain time at a certain age and even by a certain method. Most children are so taught that they suffer from mental over-feeding. The normal healthy child gets rid of the superfluous food in the simplest and most natural way.

If schools are to break away from a stereotyped syllabus and a similar course of study for all children they are faced with two problems: What knowledge should a child be able to obtain in his school, and how can a staff capable of supplying his needs be recruited?

One can get a great deal of general help on the question of what knowledge is worth while and it takes a teacher farther than more precise classifications, for it leaves him free to apply the generalization in the way most suited to his school.

Professor Whitehead, in *Adventures of Ideas*, maintains that 'a society is to be termed civilized whose members participate in the five qualities : Truth, Beauty, Adventure, Art and Peace'.

The vital condition of active participation carries with it necessary knowledge and, in one of its manifold forms, the schools, as civilizing agents, must supply it. Yet, if it is true that the child should be the seeker after knowledge—and so, surely a 'participator in Adventure', it is he only who can determine in which form he needs it, he only who can be sure of what knowledge, at least for the present, is worth while.

Yet this problem is almost entirely solved by parents and teachers. Occasionally, sometimes even late in the university course, the pupil rebels and takes his education into his own hands ; but the majority of children are so helpless and necessarily ignorant, so willing to assume that 'learning' is a sort of medicine that it is wise to swallow as quickly and as cheerfully as possible, that they take what is given them and make use of and enjoy some small fraction of it. This does not imply that most children dislike school life, for they don't. In many cases friendly teachers, pleasant companions and plenty of occupation make the day pass pleasantly and in comparison home seems dull. In other cases either certain sections of the work—the all-round rather bookish child scores here over the child with special aptitude—and the games compensate for less liked or disliked parts of the curriculum. As nothing is more pleasant than success and the approval of one's elders, the child whom the curriculum of the average school partially suits, enjoys his school-days.

Yet if one talks over the question with even good ex-scholars some seven years after they have left behind them such childish things as examinations, time after time, though full of praise of their own school and the way they were taught, they frankly confess to having forgotten all

their Latin, history, mathematics, French and to their lack of interest in (euphemistically called lack of time for) learning. 'I am no highbrow' is asserted—with pride as likely as not.

Men even confess to having been utterly unhappy at school and finding no intellectual compensations for their childish misery, and yet they send their sons to the same school and when the boys groan at the boredom of 'swotting' for Common Entrance or whatever may be the coming test, they answer: 'Good for you, my son. I had to do it and it will make a man of you.'

No people are more reactionary about any reform in curriculum than the good parents who take an interest in their children's education. 'I could read at five. I could count up to one hundred before I went to school. I had read all Caesar by the time I was John's age. I used logarithms at twelve.' The cry is endless and seldom varied by 'Though I could dologarithms when I was twelve' I certainly could not have written as good a play as John's, nor made as lovely a tune as Joan's.' Most teachers are left wondering if, at the cost of so many omissions in self-education, the vaunted knowledge was worth while and they turn to other standards for what should be taught.

Surely knowledge is worth while if it is of value to the learner and even if we, with greater insight and experience, think some of the ways he spends his time uneducational and regret that his interests are not directed towards what we think will later be more valuable for him, nevertheless we do more harm than good in forcing him to learn.

Surely all this panic that is aroused if we let children find their own mental food is nothing but lack of faith in the fundamental interest and value of knowledge? Just as mistakes are made in dealing with a growing child because his educator ignores his personality and assumes all boys are alike, so he makes mistakes when he assumes all children need the same mental food or will digest it in

the same manner and at the same rate. The problems of individual differences in methods of learning have already been discussed¹ and making a curriculum is a technical problem dealt with in a previous book.² Here it only remains to give general criteria of the worthwhileness of knowledge.

In the widest sense it must be useful. I do not mean that history should only be studied if it is an examination subject, but rather that, even if it is an examination subject, it is in the long run useless unless it develops a child's personality—adds, for example, to his interest in men and the motives that stir them, fires him with a desire to emulate the young Marco Polo or sends him searching for stories or records of the life in his own town.

In such a sense knowledge should be a guide to conduct and only in so far as we all, even mature people, look to the future and plan for it, can there be any justification for spending the present on the acquisition of knowledge or skill that probably, but not certainly, will be useful in later years. If such knowledge is to be acquired gladly—the only security for its retention and later use—we must have the pupil as an active co-operator. He must learn his tables because it will save him time to have them in his mind, 'do home work' to improve his spelling, and later make amazing multi-coloured charts to show what influences were at work during the German Romantic revival. Thus does he acquire living knowledge and not lumber-room facts.

Consequently the curriculum must be as wide as possible so that children can find the help that they want. There are two limiting factors. The community's wishes must be consulted and though if we succeed in making active participators in Truth, Beauty, Adventure, Art and Peace, no civilized community would have cause to complain,

¹ See pp. 182–191.

² See *A First Book of Teaching*, Ch. IX.

yet interest in some aspects of truth, some forms of art, some types of adventure are so much more likely to give the child of this particular period and place chances of further participation that we try to start him on those lines.

Critics who oppose any attempt to make the field of education wider always produce examples of the impossibility of such varied schemes of work. What is to be done, they ask, if the children in Deptford yearn for training as lumbermen or dairymaids, and the children in Gloucester demand to learn shorthand? All plans dealing with mankind can be made to appear stupid if extreme cases are cited as though they would be normal happenings. In nearly all cases children are so restricted in their environment, and consequently in their interests, that they tend almost too much to do as their community does and to seek the arts and sciences of their surrounding civilization. If a teacher is so fortunate as to have in his class the exceptional boy with special abilities urging him to new forms of experience he must do all he can to satisfy such desires, and it is amazing in what devious and miraculous ways the desires of the heart do get satisfied.¹

The other limiting factor in dealing with children's zest for knowledge and experience is our own ignorance. The first thing most of us realize who deal with free children, eager to pursue their own lines of interest, is how little

¹ I cannot resist the story of an average little girl in a poor school in a poor district who firmly resisted all help at employment as she meant to go into 'proper service'. Her mother found her a place as daily maid in a little shop but she refused, and until she found herself a place as kitchen-maid in a 'big house' she had a very bad time. So did she also in her first two or three places and then she got work under a chef who saw she meant to learn and helped her. It was he who told her a kitchen-maid was wanted at Buckingham Palace and with great trepidation she applied. I suppose the chef had influence, for she got the post and now she cooks some of the King's vegetables and comes back to her old school to receive the honest admiration of all of us and to spread the good tidings of the kindness and true courtesy of 'Royalty'.

we can help them, especially if we belong, as so many teachers do, to the bookish class of people. Now in planning what special branches of knowledge shall be furthered in a school, it is obvious that it is far better for the children that we should help them to study those subjects of which we know something and in which we are interested, than expend our energy on teaching which is little more than giving them what they could find for themselves in their own simple text-books.

In the infant and junior schools where a large share of the children's time is given to working out their own plans, the teachers are always discovering gaps in their own knowledge and skill. Sometimes they can remedy them, but very often the best they can do is to find books from which the children can teach themselves. The same holds good throughout school life, and the older the children get, the greater should be their responsibility for their own education.

Hence in every school there should be fixed courses of study and free time when the specialists in these branches can help pupils who want additional help or who want to study some different branch of the subject. But for children whose interests lead them outside the school course, there should also be help, though often it can only be suggestions of books that are useful and further encouragement to teach themselves.

It is in this encouragement to children to teach themselves subjects and skills of which we are ignorant that, it seems to me, modern teachers show themselves better educated and so wider-minded than many of their teachers. As a child at a good but very disciplined formal school I yearned to learn geology—why, I don't know. I went seeking advice from all and sundry; at home I was told of Lyell, but as we had none of his writings that was a dead end. Then I took my courage in my hands and asked a rather severe form mistress, a historian and no friend to any branch of science. She rightly pointed

out to me how much my school work would be improved if I would spend spare time in learning what was set me instead of seeking fresh fields—all perfectly true of course, but no use as advice at that time and in that way. And such a reception of, after all, a not very sinful request prevented my having the courage to go to the one person on the staff who might have helped me, the head mistress. But nowadays one is hardly ever at a teachers' meeting without hearing 'One of my children wants to learn so and so—can any one tell me where I can get a book on it or how I ought to begin?'¹

There is, however, still a tendency for some teachers to judge children's intelligence by their interest and success in school work. At least this is the only explanation I can give of teachers who declare that all their children are 'duds', because they are the average children left to be taught in senior departments, while the more bookish, and those whose intelligence quotient is above normal, have moved on to secondary or trade schools.

But these children in senior departments make up the great majority of those of school age; they are going to be the average normal citizens of to-morrow and they must have average intelligence. All that is necessary is for teachers to face the fact that such children *use* their intelligence and build up their knowledge in a less stereotyped way than is pointed out to them in school. Rightly or wrongly the children dubbed duds find the knowledge offered them unpalatable and rightly or wrongly—I think rightly—have no use for it. Given freedom and encouragement, they will soon show in which direction their interests lie and what knowledge they need. After all, it is far better that during these last years at school they shall learn to produce and act plays, to organize concerts and pageants, to read books with enthusiasm and to make

¹ Generally the child in question wants to learn how to *do* something—a proof of the normal approach to learning.

wireless sets, clothes, furniture, stuffs, pots and gardens, or what they wish, than to sit good-humouredly doing what they can of the things demanded by a teacher; things that seem to them and their people 'just school work', soon to be forgotten as the manly moment of leaving school arrives, and only now attempted to please a teacher whom they like.¹

THE TRAINING IN CHARACTER

The aim of education is often given as the making of character, and I have tried to show that in so far as all life is educative and all experiences shape personality, character, or personality in action, is the education that life gives us.

Teachers, both in their capacity as instructors in skills necessary for civilized life and as professors in universities for children, play a great part in the training, for they above all people are responsible for enlarging a child's knowledge. Now the connexion between ideals, tastes, standards and conduct is so close and vital that what is taught in

¹ Just after writing this section I read in *The Times Educational Supplement* an account of a fully equipped theatre, with seating accommodation for 250, a stage, curtains, drop scenes, &c., a grand piano and an extensive wardrobe which is the possession of the children of Ancoats, Manchester. Miss Hendshaw, the Curator of the Horsfall Museum, through the medium of the play centre, enables about 6,000 children to have a chance of producing their own plays. The plays are produced by groups of children who are friends or by troupes from a school. After a performance it is usual for a group of children to ask permission to produce a play and when possible they are given help in selection. The plays are rehearsed in school playgrounds and in the streets. The final rehearsals are held in the theatre when Miss Hendshaw helps them. If the play is successful it is repeated many times to different audiences and all seats are free. There is a successful troupe of minstrels at present who make constant improvement in their show. Can we not have one of these theatres in every district where there are children? And concert rooms and workshops?

school should, to be useful, either directly or indirectly influence conduct. Knowledge acquired for an examination or to escape punishment and discarded as soon as possible is dead and useless.

The child so interested in history that he goes to see Cleopatra's Needle or a Roman Camp on a Saturday morning has a far greater chance of growing into a civilized man, able to enjoy the amenities of modern life, than the child who 'knows' more history but thinks of it as a book to be learnt.

Again, it is a case of the better driving out the less good, as in all sound habit-making, for however monotonous a man's work is, he will have a compensatory life of leisure if he has learnt to expend it on pursuits that are lastingly interesting and demand absorbed attention. It is said that such crowds watch football matches, go to dog races, or pack into cinemas because thus for the time being they find distraction from their dreary existence. It is bad enough to think that so many people, much like ourselves in other respects, should have to pass hours of their life in uncongenial occupations, or worse still, only seeking for employment. But those of us who are fortunate enough to know how absorbing are great literature, music, and the outdoor world of sights and sounds must also realize the effect of knowledge on character. 'There but for education go most of us', can be easily said as we watch our fellow men spending time and money in what seems to us unprofitable ways.

The same could be said with equal justice about the folk who are lacking in those standards and ideals which compel a man to do his duty to his community. The more sympathetic psychologists investigate the cause of crime, the more assured they are that in nearly all cases it is lack of right conditions in the upbringing during childhood and adolescence.

The average child is not born good or bad ; he is born

a-moral and whether he grows into a good citizen, acting as he would have others act, depends on his early training. Teachers have here a great responsibility, especially if their pupils come from homes where little help is given them ; homes, for example, where the father either as cat burglar, purveyor of useless nostrums or an anti-social employer, preys on society. Children from such homes possibly have in school their only chance of learning to give as well as take, to appreciate the need of careful work and the value of necessary drudgery, to find pleasure in the active pursuit of knowledge and art. Here can they learn of the beauty of peace, the stirring adventure that the search for knowledge entails, the delight of discovery. And here they should be living in peace and amity with their own generation, helping each other and their elders, sharing their pleasures, learning to take criticism and profit by it and to give criticism humanely ; learning, in fact, to live and let live.

I do not want to imply that the schools unaided can make of England's green and pleasant land a New Jerusalem. The community that houses its people unsatisfactorily, lets millions stand idle, leaves children in wretched school buildings and with insufficient teaching staff, often not suitably equipped for their work, are equally, if not more, at fault. But it is useless for teachers to leave it for the community and for the community to say ' What are the schools doing ? ' when some newspaper or other cries havoc over juvenile delinquency. Those of us who have watched the steady improvement during the last twenty years in any neighbourhood know how much the schools have done and are unceasingly doing to improve the physique and character of the nation's children. But more still remains to be done ; the people who think another man's children do not need the same care as their own have all spent the most plastic years of their lives at school ; so too have the men who get money under false

pretences ; and the slackers, the grumblers, the selfish and the slanderous. So too do all who need re-education. There is yet enough to be done in the schools to keep generations of teachers busily employed and to spur them to use every available means to educate their pupils for citizenship as well as leisure.

TESTS OF ACHIEVEMENT

Such, then, are the achievements of true education, and whether a lad leaves school keen on books of travel but bored with history, slow at figures but interested in acting or with other personal likes or dislikes is of very little importance. What we do care about is that he should go out willing and eager to take his share in the work of the world and abhorring the idea of exploiting others ; full of schemes for his leisure time and friendship for his companions.

On what lines his education has proceeded must depend on a host of factors, his environment and type of community, the culture of his elders both at home and at school, his native ability.

STANDARDIZED TESTS

There are, nevertheless, growing numbers of 'achievement' tests and the Board of Education in its pamphlet upon *Tests for Retarded Children* urges that 'tests in scholastic subjects, standardized for age, would prove of the greatest value to teachers and others. They would enable teachers to discover whether the children were improving or otherwise ; and might be very helpful in suggesting the causes of such changes.'

It is an age of psychological testing and many a teacher would find it interesting and valuable to know whether the children in his class could achieve in reading, arithmetic

and spelling the average achievement quotient. But he must also remember that only the achievements in the use of the tools of knowledge can be thus tested. So far there are no reliable tests of those ideals, standards, tastes, enthusiasms of all kinds that will urge the child when he leaves school to live a civilized life, or of that concentration on attainment and persistence of effort that will enable him to live consistently according to his own standards of what makes life a valuable experience.

It seems to me to need no apology that, though writing a technical book for teachers, I should go outside directly educational literature for the tests of achievement in education. They do at any rate encourage all of us teachers to remember the larger issues and to ponder on the infinite variety of purposes that are implied by the word 'education'.

GENERAL CRITERIA

*The Good Man*¹

If a man be gracious and courteous to strangers it shows he is a Citizen of the World ; and that his heart is no island cut off from other lands ; but a continent that joins to them. If he be compassionate towards the afflictions of others it shows that his heart is like the noble tree that is wounded itself when it gives balm. If he easily pardons and remits offences it shows that his mind is planted above injuries.

*The Activities of the Spirit*²

So the spirit has three activities, and three alone, as it has three desires ; namely the moral, the intellectual, and the aesthetic activities. A man lives so that he may exercise these activities of the spirit and for no other reason. . . . The philosophy of the spirit says that the

¹ Bacon's *Essay on Goodness*.

² From *The Ultimate Belief*, by Clutton Brock.

business of living is subsidiary to them. . . . All this, perhaps, will seem commonplace to the reader. But I would ask him, especially if he is a teacher, to note the fact . . . that because they are activities of the spirit they are to be exercised for their own sake.

Yet the philosophy of the spirit is true ; and we cannot make education easier by ignoring its truth ; we cannot teach well through fear ; whether our own fear or the fear of the pupil. The best way to prevent a boy from going to the bad is to teach him to go to the good ; and he can only be taught to go to the good by those who know what the good is. Obedience in itself is not good or bad ; the young must learn it only because they have to learn, and you cannot learn without obedience. But they should be made to understand that obedience is only a means to an end and that end the freedom of the spirit to exercise its own proper activities. A boy cannot be taught what is good or true or beautiful. He can only be trained so that he may find out for himself what is good or true or beautiful, so that his desires of the flesh may not overcome his desires of the spirit.

Actable Education ¹

And what of the education we are giving to children in the schools, and to young men and women in the universities ? Is it actable education ? Is it of the kind they can follow up and develop into continuous culture of a lifetime ? Will it help them to enjoy the universe and to love it, or will it merely swell the army of exploiters who would make what they can out of the blind machine and so increase the confusion into which the unhappy drama is now drifting ? Will their education cease the moment they leave school, as a thing for which they have no further use,

¹ From 'Education and Religion', in *A Living Universe*, by L. P. Jacks.

or will it continue and prolong itself to the end of their days as a vital motive for good work? According as the answer falls out one way or another, you have the difference between an education which is a reality and an education which is a sham. Education will become *real* when all the children and all the adults are being trained to play their parts as living members of a living universe. . . . Give to the children an education which shall lead up stage by stage to the acting of Truth, the acting of Beauty, the acting of Goodness.

*The Definition of a Gentleman*¹

Hence it is that it is almost the definition of a gentleman to say he is one who never inflicts pain. This description is both refined and, as far as it goes, accurate. He is mainly occupied in merely removing the obstacles which hinder the free and unembarrassed actions of those around him; and he concurs with their movements rather than take the initiative himself. His benefits may be considered a parallel to what are called comforts or conveniences in arrangements of a personal nature; like an easy chair or a good fire which do their best in dispelling cold and fatigue, though nature provides both means of rest and animal heat without them. The true gentleman in like manner carefully avoids whatever may cause a jar or jolt in the minds of those with whom he is cast: all clashing of opinion, or collision of feeling, all restraint, or suspicion, or gloom or resentment; his great concern being to make every one at their ease and at home. He has his eyes on all his company; he is tender towards the bashful, gentle towards the distant and merciful towards the absurd; he can recollect to whom he is speaking; he guards against unreasonable allusions or topics that may irritate; he is seldom prominent in conversation and never

¹ From *The Idea of an University*, by John Henry Newman.

wearisome. He makes light of favours while he does them and seems to be receiving when he is conferring. He never speaks of himself except when compelled, never defends himself by a mere retort, he has no ears for slander or gossip, is scrupulous in imputing motives to those who interfere with him, and interprets everything for the best. He is never mean or little in his disputes, never takes unfair advantage, never mistakes personalities or sharp sayings for arguments, or insinuates evil which he dare not say out. . . . He observes the ancient maxim that we should conduct ourselves towards our enemy as if he were one day to be our best friend. . . . He is too well employed to remember injuries and too indolent to bear malice. . . .

If he engages in controversy of any kind his disciplined intellect preserves him from the blundering discourtesy of better, perhaps, but less educated minds, who like blunt weapons, tear and hack instead of cutting clean. . . .

He may be right or wrong in his opinion, but he is too clear-headed to be unjust. . . . Nowhere shall we find greater candour, consideration and indulgence ; he throws himself into the minds of his opponents, he accounts for their mistakes. . . .

He is a friend of religious toleration and that, not only because his philosophy has taught him to look on all forms of faith with an impartial eye, but also from the gentleness and effeminacy of feeling which is the attendant on civilization. Not that he may not hold a religion too, in his own way, even when he is not a Christian. In that case his religion is one of imagination and sentiment ; it is the embodiment of those ideas of the sublime, majestic and beautiful, without which there can be no large philosophy. Sometimes he acknowledges the being of God, sometimes he invests the unknown principle or quality with the attributes of perfection. And this deduction of his reason, or creation of his fancy he makes the occasion of such excellent thought, and the starting-point of so varied and systematic

a teaching, that he even seems like a disciple of Christianity itself.

*The Aims of Education*¹

I will take four characteristics which seem to me jointly to form the basis of an ideal character: vitality, courage, sensitiveness, and intelligence. . . . I firmly believe that, by proper physical, emotional, and intellectual care of the young these qualities could be made very common. . . . A community of men and women possessing these qualities in the highest degree that education can produce would be very different from anything that has hitherto existed. Very few people would be unhappy. . . . Good health could be almost universal. Poverty, since the industrial revolution, is only due to collective stupidity. Sensitiveness would make people wish to abolish it, intelligence would show them the way and courage would lead them to adopt it. . . .

One generation of fearless women could transform the world by bringing into it a generation of fearless children, not contorted into unnatural shapes, but straight and candid, generous, affectionate and free. Their ardour would sweep away cruelty and pain which we endure because we are lazy, cowardly, hard-hearted and stupid. It is education that gives us these bad qualities and education that must give us the opposite virtues. Education is the key to the new world.

*Children's Rights and Duties*²

What are a child's rights and what are the rights of society over the child? Its rights are summed up in the right to live . . . and this right includes and in fact is the right to be what the child likes and can, to make what it likes and can, to smash what it likes and can, and

¹ From *On Education*, Ch. I, by Bertrand Russell.

² From *Parents and Children*, by G. B. Shaw.

generally to behave in an altogether unaccountable manner within the limits imposed by the similar rights of neighbours. And the rights of society . . . to require it to qualify itself to live in society without wasting other people's time : that is it must know the rules of the road, be able to read placards, compose and send letters. . . . It must know some law, some political economy, agriculture enough to shut gates of fields, sanitation enough not to defile its haunts and religion enough to have some idea of why it is allowed its rights and why it must respect the rights of others.

*Tests of Educated People*¹

Educated people must satisfy the following conditions :

(1) They respect a man's personality and therefore they are always tolerant, gentle, polite, yielding. They do not make a riot about a little hammer or a lost rubber ; living with others they do not make a favour of it and when leaving do not say, ' It is impossible to live with you.' They excuse noise and cold and over-roasted meat and witticisms and the presence of other people in their house.

(2) They are compassionate and not only with beggars and cats, for they grieve in their soul for what the naked eye does not see.

(3) They respect other people's property and therefore pay their debts.

(4) They are pure in heart and they fear a lie as they fear fire. They do not lie even in trifle. . . . They do not show off, they behave in public just as they behave at home. . . . Out of respect to other people's ears, they are often silent.

(5) They do not belittle themselves to arouse the com-

¹ From *Life and Letters of Anton Tchekhof*, translated by Kob-
leansky and Tomlinson.

passion of others. They do not play on the strings of other people's souls so that they shall sigh over and fondle them. They do not say, 'People don't understand me!' It is vulgar, musty, false.

(6) They are not vainglorious. They do not care about such false diamonds as acquaintanceship with celebrities.

(7) If they possess talent, they respect it, for it they sacrifice women, wine, vanity. . . . They are proud of the talent . . . and also they are fastidious.

(8) They foster the aesthetic feeling in themselves. . . . They, especially if they are artists, need freshness, elegance, humanity. . . . And so on. In order to educate oneself it is not enough to read *Pickwick*, to learn by heart a monologue from *Faust*. . . .

Continuous day and night labour is needed, constant reading, study, will . . . every hour is valuable.

*Requisites for Social Progress*¹

Wisdom is the fruit of balanced development. It is the balanced growth which it should be the aim of education to secure. . . .

My own criticism of our traditional educational methods is that they are far too much occupied with intellectual analysis and with the acquirement of formularized information. What I mean is that we neglect to strengthen habits of concrete appreciation of the individual facts in their full interplay of emergent values and that we merely emphasize abstract formulations which ignore the aspect of the interplay of diverse values. . . .

The type of generality which above all is wanted, is the appreciation of the variety of value. I mean an aesthetic growth. There is something between the gross specialized value of the mere practical man and the thin specialized value of the mere scholar. Both types have missed some-

¹ From *Science and the Modern World*, by Whitehead.

thing ; and if you add together the two sets of values, you do not obtain the missing elements. What is wanted is an appreciation of the infinite variety of vivid values achieved by an organism in its proper environment. When you understand all about the sun and all about the atmosphere and all about the rotation of the earth, you may still miss the radiance of the sunset. There is no substitute for the direct perception of the concrete achievement of a thing in its actuality. We want concrete fact with a high light thrown on what is relevant to its preciousness.

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